

gopher peewee



NINETEEN HUNDRED FORTY-ONE



The 1941 Gopher Peavey



Annual Publication
of the Forestry Club,
University of Minnesota

Tally Sheet

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FOREWORD

From an imbroglio of sweat, toil, and turmoil has developed the 1941 Gopher Peavey. Its theme may be categorized as "Minnesota Forestry" with an interspersion of humor, gaiety, and friendship—all concomitant qualities in student life.

With a hope and a prayer and a shout, we present to you this 1941 Peavey. May it serve as a bond of fellowship between students, alumni, and OUR school.

The 1941 PEAVEY STAFF

DEDICATED

to the



This volume is dedicated to the Conservation Committee of the Junior Association of Commerce of the City of Minneapolis because of the valiant work they have already accomplished in behalf of conservation and more especially because they have been one of the few lay organizations to ignore the temptation to fritter away their energies on petty local demonstrations, and have devoted themselves wholeheartedly to the solution of the basic problems of conservation

STATE FORESTS

By H. G. WEBER

State Forests have been in existence for many years. This is a well known fact. But it is only recently that they have been put under rather sound forestry principles of operation. In the future, no doubt, these forestry practices shall approach the intensity of operation and management that is needed. In this paper, H. G. Weber, present State Forester of Minnesota, discusses the establishment, the present-day management, and the future of State Forests in Minnesota.

In 1897 certain lands near the shore of Gull Lake were donated to the state of Minnesota by the Pillsbury interests, and in 1917 all of the state lands within the Superior and Chippewa National Forests were set aside as state forests. Thus, state forests were started in Minnesota. Since then, by legislative action, additional forests have been established until Minnesota now has 31 state forests aggregating a gross of 5,338,238 acres, of which 1,335,170 acres are state owned.

The boundaries of most of the more recently established state forests were determined by two factors, the first being a concentration of state ownership in an area, and the second being the presence in large quantities of lands within the area which were tax-delinquent to such a degree that forfeiture to the state would result. With land use in the northern part of the state in a chaotic condition, these factors were perhaps as good a guide as could have been used at the time. Since then great strides have been made in the cut-over region of Minnesota in the direction of planned land use.

The basic reason for the consideration of the land use in an intelligent manner

was the fact that many of our northern counties found themselves in a state of practical bankruptcy because of lands forfeiting for non-payment of taxes.

This situation led to the passage of legislation which provided some methods of organizing land use. First, an act was passed enabling the counties to classify the land within the county on the basis of conservation or non-conservation uses and to adopt a zoning ordinance. Then, following the constitutional amendment, enabling legislation was passed which provided for the exchange of lands between the state and the federal government or the state and private individuals for the purpose of consolidating conservation lands in units which would lend themselves to better administration.

Under the provisions of the zoning act three counties have already classified their lands and have passed zoning ordinances, namely Koochiching, Lake of the Woods, and Carlton; and five other counties have requested the aid of the Bureau of Agricultural Economics in making a preliminary survey for such classification and the subsequent zoning. Since the method of zoning involves meeting with the settlers, the township officers, and not less than two public

hearings held by the county officers, great interest has been developed throughout Minnesota in planned land use. Many communities, especially those on the Iron Range, are very interested in establishing community forests. Several counties are also interested in establishing county forests.

State forests as established in Minnesota were located by use of the best information available at the time of their establishment, but a definite pattern set up by the people of northern Minnesota has established the fact that while the state forests are in general well located, some of the boundaries should be changed. This should be done in order to conform with the land use zoning programs developed after intensive study by the people and officials of the northern counties.

The statement has been made, and justly so, that the state forests are "paper forests". It is true that the boundaries of the forests were arbitrarily established and that the gross area was out of proportion to the land actually state owned. This does not mean, however, that nothing has been done within the boundaries established by the legislature to improve the state lands along forestry principles. The fact is that by the use of labor made available through federal relief agencies, such as CCC and WPA, state owned lands within the established forest boundaries have been developed to a point where it is safe to say that forestry practices and accomplishments within state forests are approximately 15 years ahead of where they would have been had not these federal agencies been available.

Some of the accomplishments of the CCC have been the construction of 1,269 miles of fire truck trails, ranging from single lane low service to double lane high service; 1,964 miles of telephone line; the construction of 54 lookout towers and 222 headquarters, warehouses and other buildings; the planting of 16,993 acres and the improvement of stand on 34,082 acres. Where fire hazards were greatest, fire hazard reduction work was carried on on 21,419 acres.

Certain measures are before the legislative body now in session, most of them in the form of amendments to existing laws, which will greatly aid in the use of these laws for the development of conservation areas set aside on a long-term basis for conservation uses.

As a concrete example of the application of the laws for the purpose of consolidation of areas, let us consider two examples of the areas set aside as state forests. The George Washington Forest boundaries as established encompass 341,440 acres. At the present time 28 percent of this is state-owned, and 30 percent is tax-delinquent to a point where forfeiture will occur upon publication of the proper notice by the county. Thus we would have 58 percent of the area state-owned and classified on a long-term basis as conservation land. The federal government has expressed a willingness to purchase privately owned lands in state forests to exchange with the state for state owned lands located within the boundaries of national forests. Since there are 400,000 acres of state owned lands within the boundaries of the Sup-

erior and Chippewa National Forests, it may well be assumed that the federal government could purchase such private lands within the George Washington State Forest which were more suited for conservation purposes than for agriculture and, by exchanging these purchases for state owned lands within the national forests, raise the holdings of the state within the George Washington Forest to at least 80 percent of the total area.

Another example is the Pine Island State Forest. Here we find that 69 percent of the area, or 287,854 acres out of the gross of 384,142 acres, is already state owned and forfeiture through tax-delinquency within that area will within the next two years bring the state ownership well above the 80 percent mark.

It is obvious, therefore, that the state lands within the areas designated as state forests in Minnesota can be consolidated into large enough holdings to admit of long term forestry management. Unfortunately, up to the present time, state forests have been considered as something apart from the people and communities of the areas in which they are located. This was very unfortunate since the success of a state forest is primarily dependent upon its being woven into the community needs and the community welfare. With the tremendous interest that is being developed among the people in the problem of land use, it is obvious that the state forests when consolidated to the extent indicated above will be a part of the communities. At that time every person in the adjacent areas will feel that he has an interest in the forest since it was by action of the individuals themselves and the subdivis-

ions of the state government that the lands were set aside for conservation purposes.

One of the things it is important to avoid in the discussion of state forests is the promise of great financial income from the forest. A great percentage of the area which will eventually be set aside for conservation purposes will consist of cut-over lands which have been denuded to various degrees by logging and fire. It will take many years to bring the poorer classes of this land back into forest production and to develop them to a point where income from forest products will be produced.

The picture, however, is not wholly dark even on a financial income basis; for we believe that by proper management timber sales can be continued at the present volume without diminishing the available stand of timber. It has been stated by several agencies making investigations that the present cut of timber can be increased without diminishing the stand of thrifty timber. This probably is a fact if the theory is applied only to a period of years which would allow the cutting of the present mature and over-mature stand. After that cut was made, we believe that sales would have to be adjusted downward to approximately the volume now being cut.

Of course the financial income from timber grown on conservation lands should be considered as only a very small portion of the benefits of state forests or any other conservation area to the people of the state. There are many factors which cannot be measured in dollars and cents, as can timber production, which

are an asset to the people of the state of Minnesota. Water conservation, cover for game and wild life, and recreation, are only a few of these benefits upon which a monetary value is difficult to place.

We do not visualize the state forests as we propose to develop them in Minnesota, as wilderness areas devoid of settlement and places which have no part in the every-day life of the people of Minnesota. We believe that settlement can be maintained in a small degree on lands within these areas when such lands are

not isolated to the extent that their occupancy becomes a burden upon the county because of road and school maintenance. Certainly adjacent to all of the forest areas are settlements which occupy lands suitable for agriculture and for which the county can maintain road and school facilities on their tax returns. The state forests will then be able to contribute to the income and welfare of these communities. It is toward this goal that we are aiming; and while considerable time and patience will be necessary to accomplish this aim, we believe that the results will be well worth while.



JUST ANOTHER SMOKECHASER

By FRANK H. ANDERSON

When "Uncle" sends you out alone?
At first it ain't so bad.
You're planted down in a mountain home,
And forget the times you've had.

You gaze around for things to do,
And plenty meets your eye.
You want the place to look like new,
And you wade right in knee high.

You clean up the grounds and mope around,
And put the joint in shape;
Arrange your stock and tune the clock,
And everything is jake.

And then you find that the next in line,
Is to try your luck as cook.
If you want some bread, you scratch your head,
And then consult the "book".

The bread is good; you knew it would;
And you pat yourself on the back.
And then you bake some pie and cake,
And munch it away by the sack.

You feel as snug as a bug in a rug,
And whistle a merry ditty.
And think of the saps that live on scraps,
And slave away in the city.

Something is wrong; the summer's half gone,
And you lay around on your bunk.
There's nothing to do; your time's half through;
And your belongings have dwindled to junk.

The nights are long; your gumption's all gone;
And you curse and bemoan your fate.
And you long for the time you'll leave this behind,
And commence to be pullin' your freight.

You get pretty lazy; you dang near go crazy;
You've read till you're nearly blind.
All work you waive; you won't even shave;
And your hair is long behind.

The end is near; you hope you don't hear
Any talk of a fire.
When the telephone sounds, like a pack of hounds,
You wonder who's on the wire.

You sneak to the phone, chilled to the bone,
And answer in quavering voice.
Yes, it's the ranger; but he says there's no danger;
And you break right down and rejoice.

Then one day you wake, with shiver and shake,
And holler and jump up and down.
The sky is all gray, like a dirty ash tray,
And you act like a lunatic clown.

And comes the rain; it beats 'gainst the pane;
It hammers a tune on the shakes.
It blows through the door, and drops on the floor,
And you sure love the sound that it makes.

It rains for a week; it floods lake and creek;
The trees are all laden with moisture.
You lie on your back, in your cozy old shack,
As snug as a shell-bound oyster.

At last comes the time, when over the line,
Comes a message so clear and sweet:
"Wake up, you clowns—it's time to come down."
And you prance around on your feet.

You pack up your junk, and roll up your bunk,
And thumb your nose at the weather.
You dash from your nest like the "Pony Express"
And your heart is as light as a feather.

You don't look around, but dash straight for town,
And you burn big holes in your socks.
You may be some stale, but you sure burn the trail;
And sparks fairly fly from the rocks.

You get to the town and wander around,
Oh—for maybe a week.
Then you wish you were back in your little old shack,
High up on that lonesome peak.

By FRANK H. ANDERSON,
(Kootenai National Forest, Libby Dist., 1930)

The Rotation...



Seniors

WILLIAM E. ANDERSON
"Ian"

St. Paul, Minnesota
General Forestry
Forestry Club, Xi Sigma Pi, "M"
Club, Hockey '39 - '41, Intra-
mural Sports, Foresters' Day Assn.
'41. Summer Work: C.C.C. Camp
Sawbill '39, Lake States Forest
Expt. Station '40.



ROBERT T. BILSTEIN
"Bob"

Foxboro, Wisconsin
General Forestry
Forestry Club, Voyageurs, Xi Sig-
ma Pi, Gamma Sigma Delta, Al-
pha Zeta, Gopher 4-H, Intramural
athletics, Foresters' Day Assn. '41.
Summer work: E.C.W. '37, S.C.S.
'38, Chelan National Forest '40.

MILNER L. ANDREWS
"Monk"

New Ulm, Minnesota
Commercial Lumbering
Forestry Club, U. of M. Band.



MORRIS R. BLACKBURN
"Blackie"

Park Rapids, Minnesota
General Forestry
Forestry Club, Tau Phi Delta,
Gobblers. Summer work: Minne-
sota Blister Rust Control, Asst.
District Agent '34-'40, M. F. S.
Palo Markham fire '36.

JOSEPH M. APP
"Joe"

Knife River, Minnesota
General Forestry
Forestry Club, Lodgers' League,
Peavey Staff, Treasurer '40, For-
esters' Day Assn. '41, Catholic
Students Confraternity. Summer
work: Weyerhaeuser Timber Co.,
Klamath Falls, '36, U.S.F.S., '37, '40.



AUGUST E. BLOCK
"Augie"

Durand, Wisconsin
General Forestry
Forestry Club, Alpha Zeta, Xi Sig-
ma Pi. Summer work: Chequame-
gon National Forest '37, Couer d'
Alene National Forest '40.

JOHN N. BALLANTYNE
"Johnny"

Portal, North Dakota
General Forestry
Forestry Club, Voyageurs, Intra-
mural Athletics. Summer Work:
Prairie States Shelterbelt Project
'39.



RICHARD W. DINGLE
"Dick"

St. Paul, Minnesota
General Forestry
Forestry Club. Summer work: S.
C. S. '37.

ROBERT G. BARKOVIC
"Bark"

International Falls, Minnesota
Game Management
Forestry Club, Voyageurs, Catholic
Students Council '40-'41, Newman
Club '38, Pioneer Hall Rifle Team
'39, Chairman Forestry Banquet
'41. Summer Work: Minnesota and
Ontario Paper Co. '40.



CLIFFORD E. EGELAND
"Cliff"

Minneapolis, Minnesota
Game Management
Forestry Club, Game Managers'
Club, Football '37-'38. Summer
work: Cloquet Forest Experimental
Station '40.

m a t u r e t i m b e r

ARTHUR B. EUSTIS
"Art"

Minneapolis, Minnesota
Game Management
Forestry Club, Scabbard and Blade,
Cadet Officers' Club, Wildlife Man-
agers' Club. Summer work: Na-
turalist, Boys' Camp '39-'40.



VERNON W. HAHN
"Vern"

St. Charles, Illinois
General Forestry
Forestry Club, Voyageurs, Xi Sig-
ma Pi, University of Illinois, '37-
'38, Foresters' Day Assn. '41.

WARREN E. GILBERTSON
"Gil"

Towner, North Dakota
Range Management
Forestry Club, Voyageurs, Peavey
Staff '41. Summer work: U. S. D.
A. Bureau of Plant Quarantine '40.



ARTHUR E. HAUTALA
"Art"

Brainerd, Minnesota
General Forestry
Forestry Club, Intramural athletics,
Baseball. Summer work: U. S. F.
S., Juneau, Alaska.

WILLIAM R. GILES
"Bill"

Nashauk, Minnesota
Commercial Lumbering
Forestry Club, Intramural Basket-
ball, Voyageurs. Summer work:
Chippewa National Forest '39, G.
E. Hall Labr. Mills, Walker, Minn.
'40.



ELMER Y. HAUTALA
"Hoot"

Brainerd, Minnesota
General Forestry
Forestry Club, Intramural athletics.

WILBERT A. GRAUPMAN
"Bill"

Plato, Minnesota
Commercial Lumbering
Voyageurs, Forestry Club, Foresters'
Day Assn. '41, Baseball, Peavey
Staff '41.



WILLIAM R. HOSFIELD
"Hosie"

Owatonna, Minnesota
General Forestry
Forestry Club, Voyageurs, Univer-
sity Chorus. Summer work: Sur-
veying, aerial map survey, AAA.

CHALMER W. GUSTAFSON
"Gus"

Duluth, Minnesota
General Forestry
Forestry Club, Foresters' Day Assn.
'41.



ROBERT W. JOHNSON
"Bob"

Augusta, Wisconsin
General Forestry
Foresters' Day Assn. '41, Intra-
mural athletics. Summer work:
Cloquet Forest Experiment Station
'40.

m a t u r e t i m b e r

THOMAS A. KLICH
"Click"

La Crosse, Wisconsin
Game Management
Forestry Club, Wild Life Managers' Club, Tau Phi Delta, Ag Union Board '40-'41, Gobblers, Intramural athletics, Foresters' Day Assn. '41. Summer work: Landscaping work '38-'40.



HOWARD B. OSMUNDSON
"Ozzie"

Minneapolis, Minnesota
Range Management
Forestry Club, Voyageurs, Sec. '41, Y. M. C. A., Associate Editor of Peavey '41, Foresters' Day Assn. '41.

ALLEN E. LEE
"Zombie"

Miles City, Montana
General Forestry
Forestry Club, Gobblers, Tau Phi Delta, Pi Phi Chi, Intramural Basketball. Summer work: U. S. Coast and Geodetic Survey '37.



DOUGLAS PARSONS
"Parse"

Minneapolis, Minnesota
General Forestry
Forestry Club, Intramural athletics, Foresters' Day Assn. '41, Peavey Staff '40-'41. Summer work: Life Guard, '37-'41.

JOHN H. LINDBERG
"Lindy"

Minneapolis, Minnesota
General Forestry
Forestry Club, Associate Editor of Peavey '40, Foresters' Day Assn. '37-'40.



RANDALL J. PEAVEY
"Ran"

Grand Rapids, Minnesota
Game Management
Forestry Club, Lodgers' League.

DERWOOD F. LUTKE
"Lud"

Durand, Wisconsin
General Forestry
Forestry Club, Xi Sigma Pi, Alpha Zeta, Phi Delta Theta, Alpha Phi Chi, Y. M. C. A., Intramural athletics, Photographic Editor Peavey '41, Foresters' Day Assn. '41.



ROBERT D. PETERSON
"Pete"

Minneapolis, Minnesota
General Forestry
Forestry Club, Xi Sigma Pi, Alpha Zeta, Gamma Sigma Delta, Vice-President Forestry Club '41, Peavey Board '39, Peavey Staff '40-'41, Editor Peavey '41, Intramural athletics, "Son of Paul" '41. Summer work: Huron National Forest, Under Field Assistant '39, Under Agriculture Aid '40.

CHARLES J. MOORE
"Bud"

Eau Claire, Wisconsin
General Forestry
Forestry Club, Intramural athletics. Summer work: C. C. C. '33-'34, Wisconsin Conservation dept. '37.



SEDGWICK C. ROGERS
"Sedge"

Chicago, Illinois
Forest Technology
Forestry Club, Phi Delta Theta, Grey Friar Society, Silver Spur Society, Ag Student Council '38, Committee on Student Affairs '39-'40.

m a t u r e t i m b e r

EDWARD F. REXER
"Ed"

Minneapolis, Minnesota
Wood Technology

Forestry Club, U. of M. Commons
Club. Summer work: Northrup
King and Co.



HARRY J. STROEBE
"Stroebe"

Appleton, Wisconsin
General Forestry

Forestry Club, Voyageurs, Forest-
ers' Day Assn. '41, President Jun-
ior Corporation '41. Summer work:
Wisconsin Conservation Dept. '41.

JOHN V. RUSPINO
"Jack"

Crosby, Minnesota
General Forestry

Forestry Club, and Welfare Work.
Summer work: C. C. C. Camp,
Big Falls, Minnesota.



JOHN A. WEBER
"Web"

Albert Lea, Minnesota
Forest Technology

Forestry Club, Lodgers' League,
Newman Guild.

MILTON F. SGOGLUND
"Skog"

Ogilvie, Minnesota
General Forestry

Forestry Club, Tau Phi Delta,
Gobblers, Intramural Athletics.



JOHN E. WISHART
"Jon"

Wethersfield, Connecticut
General Forestry

Forestry Club, President '41, Voy-
ageurs, President and treasurer '41,
Alpha Zeta, Honor Case Commis-
sion '41, Ag Student Council '41,
Chairman Foresters' Day Assn. '41,
Peavey Staff '40-'41, Steward Fresh-
man Corporation '39, Steward Jun-
ior Corporation '41, Intramural
athletics, Recipient Little Red Oil
Can '41. Summer work: U. of M.
Division of Forestry '40.

MARVIN E. SMITH
"Smitty"

Sioux City, Iowa
General Forestry

Forestry Club, Xi Sigma Pi, Alpha
Zeta, Silver Spur, Pershing Rifles,
Ag Union Board '39-'41, Peavey
Staff '39-'41, Alumni Editor '40,
Business Manager '41, Steward
Junior Corporation '40. Summer
work: Snoqualmie National Forest
'39-'40.



NORBERT A. ZAMOR
"Neb"

New Brighton, Minnesota
General Forestry

Forestry Club, Xi Sigma Pi, Alpha
Zeta, Intramural athletics.

EARL W. STAKSTON
"Stak"

Noonan, North Dakota
Commercial Lumbering

Forestry Club. Summer work: The
Lake States Forest Experiment Sta-
tion '37.



WILLIAM F. ZAUCHE, JR.
"Zauch"

Baudette, Minnesota
General Forestry

Forestry Club, C. A. A. Flight
Training.

m a t u r e t i m b e r

Reproduction - - Freshmen



Back Row: Lechner, John Anderson, Fillmore, Nelson, Black, Linne, B. Gilbert, Fredrickson.

Center Row: Neff, Waukechon, Olson, Peterson, Noble, Larson, Sorge, Connors.

Front Row: Miles, Medcalf, Bowen, Bryan, Bauck, Kemski, Shimek, E. Gilbert, Drake.

JOHN F. ANDERSON
KENNETH M. ANDERSON
ROBERT BAUCK
ARMIN BAUMAN
ROBERT L. BLACK
GEORGE BORGERDING
RICHARD A. BOSSHARD
LE DELL BOWEN
ROBERT BREKKE
JOHN E. BRYAN
NORMAN BRYANT
HARRY CARSKADEN
THOMAS CONNORS
PHILIP DAMKROGER
ROBERT DRAKE
THOMAS ERTL
WALTER FILLMORE

CARL A. FREDRICKSON
ROBERT C. FREY
BRADBURY GILBERT
EARL GILBERT
ALOYSIUS GOBLOWSKY
BERNARD GRANUM
WALTER GUSEK
ROBERT C. GUSTAFSON
RALPH HAUSLER
GLENN F. JOHNSON
RICHARD KEMSKI
GEORGE KORTIN
GEORGE A. LARSON
ROY LECHNER
RICHARD S. LEE
JAMES LINNE
SCOTT MATHESON
ROBERT A. MCKINSEY

HARVEY MEDCALF
WILLIAM R. MILES
EDWIN MOGREN
EDWARD NEFF
WILLIAM J. NELSON
JOHN R. NOBLE
HOWARD E. OLSON
JAMES E. PETERSON
DONALD PIERCE
WILLIAM REMPEL
HARLAN ROCKWELL
FLOYD W. ROMAN
EDWARD D. SHIMEK
NORMAN SORGE
WARREN VONG
JOHN WAUKECHON
RICHARD WILLIS

Poles - - Sophomores



Back Row: Prentice, Verba, Curtis, Marden, Nall, Winner, Chambers, Hall.
Center Row: Maxson, French, R. Nelson, L. Nelson, Jacobs, C. Anderson, Lundblad.
Front Row: Djerf, G. Deitschman, Erickson, Henkel, Esser, Davis.

JOHN ALLIE
CLARENCE O. ANDERSON
JOSEPH R. ANDERSON
GEORGE BAUMAN
EUGENE BERENBACH
JOHN R. BERGERON
EARL H. BERNDTSON
JOHN H. BROGAN
LAWRENCE E. BROWN
DOUGLAS A. CHAMBERS
ROBERT E. CLARK
CHESTER E. CURTIS
MAHLON DAVIS
GLENN DEITSCHMAN
WILLIAM DERX
HARVEY DJERF
ROBERT EIKUM
STANLEY P. ERICKSON
JEROME ESSER
DAVID FRENCH

DALLIS GATES
WILLIAM GILES
PAUL GOODMONSON
KEITH HALL
WILLIAM D. HANNAY
DANIEL G. HELMS
DONALD HENKEL
ROBERT HOWE
ROGER L. IVERSON
RAY JACOBS
GEORGE JAROSCAK
RUDOLPH KAJANDER
GEORGE KOBLE
WILLIAM KRANTZ
FRANK KUESEL
RALPH W. LAW
LEON LUNDBLAD
RICHARD MARDEN
GORDON MAXSON
THOMAS MILNER
WILLIAM E. MITTON

THOMAS NALL
BERNHARD J. NELSON
LOWELL O. NELSON
ROBERT F. NELSON
THEODORE C. NORDQUIST
GEORGE R. NELSON
MILTON PASTORNAK
B. CULVER PRENTICE
EARL ROOD
CHARLES SCHLESINGER
RODNEY SCHUMACHER
GEORGE SHAW
WALTER L. SOLSTAD
RICHARD C. STROMBERG
STUART K. SWANSON
ROBERT J. SWEITZER
CHESTER H. SWENSON
ROBERT VAN VOLKENBURG
ROBERT BERBA
LEE B. WINNER

Standards - - Juniors



Back Row: C. Olson, Kalton, Hallock, Kranz, B. Nelson, Brogan, Allie.
Front Row: O'Neil, Berklund, Van Valkenberg, Goodmonson, J. Anderson, Armstrong.

RALPH LEON ANDERSON

JOSEPH APP

JAY ARMSTRONG

BRUNO BERKLUND

MORRIS BLACKBURN

GEORGE FAHLSTROM

JOSEPH FOLEY

HIRAM HALLOCK

ARTHUR JANURA

WILLIAM M. KALTON

RICHARD L. LAVINE

VINCENT LINDSTROM

LEONARD MAKI

PAUL L. MILLER

BERNARD A. NELSON

CHESTER H. OLSON

GERALD O'NEIL

NORMAN J. ORDAL

ROBERT O. ROGERS

GLENN ROTEGARD

HOWARD STIEHM

Local Chapter—DELTA CHAPTER—1920

HENRY HANSEN	-	-	-	-	-	-	-	-	-	-	-	-	Faculty Advisor
MARVIN SMITH	-	-	-	-	-	-	-	-	-	-	-	-	Forester
NORBERT ZAMOR	-	-	-	-	-	-	-	-	-	-	-	-	Associate Forester
AUGUST BLOCK	-	-	-	-	-	-	-	-	-	-	-	-	Ranger, Sect.-Fiscal Agent

J. H. ALLISON
DWIGHT BENSEND
R. M. BROWN
E. G. CHEYNEY

CLYDE CHRISTIANSON
FRANK KAUFERT
RALPH DAWSON
HENRY HANSEN

L. W. REES
C. O. ROSENDAHL
T. SCHANTZ-HANSEN
HENRY SCHMITZ

P. O. ANDERSON
J. L. AVERELL

R. M. CUNNINGHAM
S. R. GEVORKIANTZ

J. A. MITCHELL
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Center Row: W. Graupman, P. Goodmanson, B. Berklund, W. Miles, H. Stroebe, J. Brogan.
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The Staff wishes to express thanks to Dr. Kaufert, E. G. Cheney, R. M. Brown, Elspeth Gurley, Doris Naeseth, and Harold Todd for their considerable aid in producing the 1941 Gopher Peavey

FRESHMAN CORPORATION of 1940

By LOWELL NELSON

We all hold the memory of Itasca. As the years go by, we remember not the hardships, the toil, and the worry; but we recall so vividly the excitement, the thrills, and the novelty of our first taste of the woods. Lest you forget, read these pages and then think — of so long, long ago.

During the first five weeks of summer, the neophytes of our forestry school labor and laugh at Itasca Park, our initiation grounds for practical training. Here at Itasca, the '40 Corporation was given the opportunity to apply their first basic fundamental principles of forestry techniques. Timber cruising, silvicultural study, entomology, ornithology, and botany were the orders of the day. Professor Cheyney opened this memorable session with his traditional "welcome" speech, "Stay away from the local lassies, and all will be well". Antagonism between the local residents and the University students has always been high, and a few of the boys did absolutely nothing to ameliorate this condition. But this was "Itasca"!

Silviculture, as taught by Professor Cheyney, dealt primarily with forest type studies. Crown density, age classification, tree mixtures, flora, and soil composition—these were the basis of our struggle. "Pace out your boundaries—ten chains by one—and then study the type". Or perhaps, "Lay out a strip, twenty feet long and one foot wide; then identify and count every darn species of plant life you can see". Thus, did we learn! Out of a confused mass of trees and thoughts came forth some reason. It's only the basement, to be sure, but it's well laid.

Professor Cheyney is always liberal with confidential "tips" as to the location of superior stands. A few of the less wary lads even believed them, only to wonder, after explicitly following his directions, why they should invariably end up in the wettest and most



insect-infested swamp in the Park. Good old Cheyney! With his puttees and his shiny pants, he's really the king of all good foresters.

Cries such as, "Chain - stick - stuck!" and, "D. B. H. 8 inches; height - 56 feet!" echoed and re-echoed through Itasca's monarchy of timber. Passing tourists did little more than tickle their scalps at these strange noises, never dreaming that they emitted from gesticulating forestry students—students making their first attempts of applying field mensuration techniques. The measuring of tree diameters and heights, together with distances, was the object of their efforts. Prior to these days, it had been imperative to master the use of hypsometers, calipers, compasses, and chains. The proverbial night cap consisted of office effort, so as to prepare height and diameter curves, to planimeter your field maps, and to design the multitude of charts and tables. Herein, lied the composite nucleus of Professor Brown's "pet" course.

Brown's unerring aim with chalk particles prevented even the most daring of the boys from trying to obtain a few extra winks of sleep during his long orations. In fact, all through the session, Brown's "killer" tasks heckled the fellows. Many a good camp brawl, football, or baseball game was broken up early in the evening merely because of those confounded plagues termed mensuration reports. There is no doubt in anyone's mind as to the "toughness" of his course. Upper-classmen verify that it's the worst grind in the University. But, nevertheless, we all lived through it which again proves the "stuff" these Freshman Corporations are made out of.

Botany was engulfing; no other word accurately defines it, for we were required to identify *all* of the common trees, shrubs, and flowers in the Park. Gentlemen named Johnson and Gorden, two super physical specimens, were the track stars who led the fellows on these grueling field marathon runs. Ancient Itasca mythology has classified them as Wingfoot and Pathfinder. It is to these men that the Freshman Corporation is indebted; for while on these botany trips, we all



absorbed the myriad of sights in the Park in their full glory. Perhaps we should say in their spasmodic glory, or that which was caught as the boys rushed on in vain pursuit of those fleet-footed instructors. Boy, how they could go!

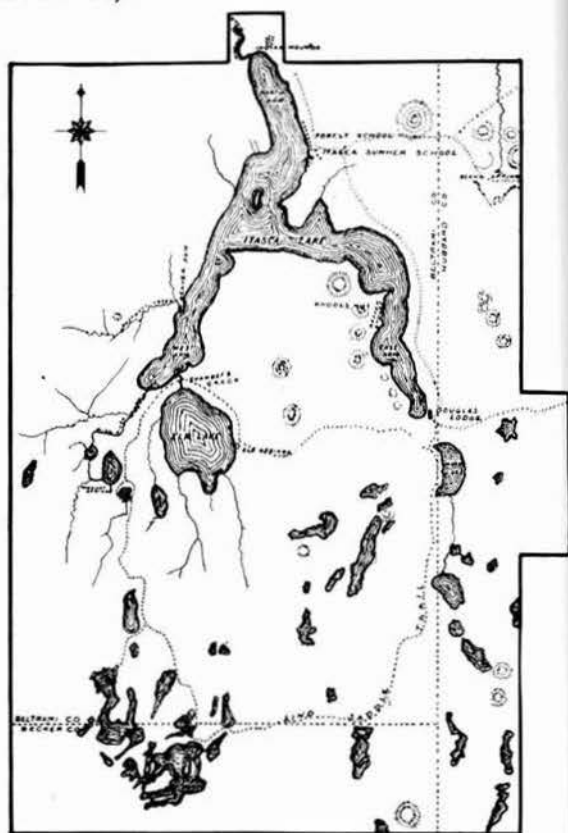
Entomology, a glorified synonym for bug science, also played a role at Itasca. Students were required to collect and classify the various forms of common insect life in the park. Mr. Hodson, chief of the bug-chasers at Itasca, instructed this course; under his capable tutelage everyone in camp became an expert. Soon, bug-chasing became a universal sport around the buildings. Many of the passing tourists were tempted to call for strong-armed men and straight jackets after seeing their grotesque antics. But slowly, their collections mounted until each fellow proudly presented the boss with his exhibits. My, but they were elegant. Gorgeous butterflies, lovely nymphs, shiny woodborers, and wet feet!

Ornithology, or the bird study if you persist, was the nemesis of a good many of the lads. We all are thoroughly convinced that Mickel had possession of Superman's ear drums. He could hear more birds in one minute than I'd ever heard in all my life. When he asked, "Did you get that one?" and we said "Yes! A crow, wasn't it?", it was very embarrassing to discover that they do have loons on Itasca Lake.

Some mention should be made of the last course of instruction—camp management. We all realized that the only way to get an 'A' was to flirt with the cooks or catch perch for Mr. Brown.

Yet others advocate that R.O.T.C. training was of great assistance. Maybe so, for their chests were certainly well trained. And it worked too.

All too soon, the sun was immersing in Itasca Lake for the last time. The '40 Corporation was soon to be history. The moon crept up large and round and luminous, casting a cold and lonely light over the tree tops. We all remembered those nights of sweat and turmoil. But we also remembered the fun — those nights of song, those days of pleasant warmth, and those moments of real happiness. The foundation of true friendship had been laid and laid firmly. For that, we are deeply grateful, and we are also grateful for our foundations as real foresters—our first taste of a woodsman's day.



BULL OF THE WOODS

By FRANK "Porky" ANDERSON, '31

Yes, the name fits him well
Where'er he may dwell,
And it's one that you'll never forget.
It comes down through time
From some ancient line
And it fits to a "T" you can bet.

With steamboats for feet
And a nose like a beet,
And hair flying loose in the breeze;
A pair of wild eyes
Like a sudden surprise
And skin like the bark on the trees;

With a pair of big hands
Like ten pound hams
And arms that hang down to his knees,
A pair of bow-legs
Like the staves on kegs
And a map like a hunk of Swiss cheese;

His clothes are all worn
And tattered and torn
And the boots that he wears are a scream.
His hat tops his head
Like the roof on a shed
Or a cork on a jug if you please.

The tobacco he smokes
Just smothers and chokes
Every "Jack" that gets within range;
And the bowl of his pipe
Sure smacks of the type
That's sadly in need of a change.

To hear him bawl
At the old cross-haul,
You'd swear you were in the war.
His trap opens wide
Like the very inside
Of a barn that's minus a door.

The very trees quake
And shiver and shake
When his bazoo swings into action.
Yea, even the ground
Fairly jumps up and down
So the "Cats" can't even get traction.

He thunders and bluffs
And blunders and muffs
Every job that befalls his lot.
He don't even know
How to back up or go
For the brain that he's got ain't so hot.

When he hears the cook yell
Or bang on the bell,
He'll tear with a speed to surprise you
Through the door of the shack
Like a bloodthirsty pack
Of bloodhounds that shagged poor Eliza.

He'll dash to the table,
Scoop up a ladle
And gargle his soup in a flash.
He'll clean up the beans,
The spuds and the greens,
And boy—how he murders the hash.

He eats enough chuck
To fill up a truck
And tops off with a cake or a pie.
Then he'll rise to the floor
And stroll out the door
With a hungry look in his eye.

In the bunkhouse at night,
He sure is a sight
When he crawls up into his bunk.
The sound of his snore
Shakes the roof, walls and floor
Till the shack looks like it were drunk.

Yes, the name fits him well
Where'er he may dwell,
And it's one that you'll never forget.
It comes down through time
From some ancient line
And it fits to a "T" you can bet.

He's got plenty of bulk—
The big windy hulk,
And he's full of "I ams, cans, and could's".
When you've read thru this all,
You'll not wonder they call
This bozo the "Bull of the Woods".

A forester turned in the following answer on one of Brown's logging quizzes: "Scissor-like poles used to determine the direction of fall of a tree are called pigaroons."



SPRING AT CLOQUET--1940

By LLOYD GILLMORE

If there be one era in the life of a student forester at the University of Minnesota which may be classified as "broadening", that era occurs during the spring of his Junior year. For the Cloquet Forest Experiment Station offers experience in every sense of the word. To realize the significance of this statement, simply absorb the content of the following discourse.

*I have written the tale of our life
For a sheltered peoples mirth,
In jesting guise—but ye are wise,
And ye know what the jest is worth.*

RUDYARD KIPLING

This corporation all started one day when Professor Allison decided it was about time that the boys going to Cloquet should choose for themselves some officers and start getting things lined up for a hard spring. So saying, he called the group together, laid down what law he wanted known, and turned the meeting over to the boys to pick out a President, Steward, and Secretary-Treasurer. With a decided lack of politics, campaigning, and even less of Robert's rules, Gillmore was selected as prexy, Smith as steward, and Ken Peterson as secretary-treasurer. Not good, but willing anyway.

During the ensuing two or three weeks, the grub was arranged for, funds collected, cabin groups arranged, and brush attire assembled. There wasn't much snow and what there was was disappearing fast, much to our disappointment—we all knew it was more fun to cruise knee deep in wet snow.

Well, as far as the records go, the first two to arrive at the Experiment Station were the steward and president, who pulled in a few days early to get a fire started in the bathhouse. Incidentally, while waiting for it to get going (over the weekend) the two boys muscled some two and one-half tons of food supplies from the dining room of the mess hall down onto the shelves in the basement. On checking the invoice, everything was accounted for but the twenty pound box of candy which the steward thought he had gained for the

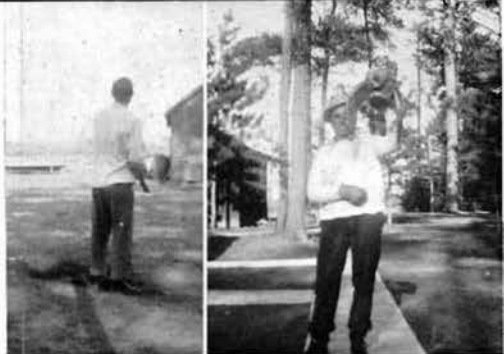
corporation at no cost—by special something or other. I wonder what ever happened to that little item.

When the final count of recruits was made, on the first Monday morning, there were just an even thirty-eight men. Even counting those in the Foresters' Cabin who didn't count, as evidenced by the adding machine which they dragged along. Thirty-eight men—but good men, arriving in all shapes of conveyances from polished sedans driven by escorting parents to such fugitives from yards (you know the kind) as was pushed in by half of the members of Poker Flat (the other half riding).

K. P. assignments were scheduled for the quarter and strange as it may seem, little if any kicks of protest were made. Credit for this must be given to the "Queen of the Camp," that lady who needs no more introduction to Minnesota Foresters than does Professor Cheyney—Mom Watkins. The only things you could write about Mom would sound trite—the things about her that really count you can't find out without knowing her and then you can't forget them. The way everyone felt about her might be illustrated by the fact that Condit (he, the bashful) felt so much at home that he didn't even blush when Mom caught him in his scanties when she brought over some hot lemonade for Bilstein who was freezing to death under 2 comforters, 4 wool blankets, 4 cotton blankets, 1 sheet, and everyone's overcoat. Although Mom's courses in cribbage, menu making and assisting in the kitchen were not scheduled in the bulletin of courses, they were duly appreciated. As assistant to Mom, Irene Maki did a bang-up job.

Management studies were first on the academic schedule, with Professor Allison exposing the fellows to the ingredients of a management plan. Dr. T. Schantz-Hansen presented a very realistic and interesting history of the station and advised the boys regarding the "do's" and "don'ts" of the station itself.

When the preliminary lectures were completed and the weather was warm enough — as evidenced by numerous skunks being seen wandering about — the men were given their equipment and sent forth to try their hand at establishing what was present on the four 40's



each crew was assigned. From this point on it was every crew for itself—both in the field and in the after dinner discussions of the day's activities. Great tales of accomplishment began to mature until you couldn't believe a word you said—and you had to say them or be lost in the din.

Although the snow was hardly deep enough to show tracks, it was not uncommon to run across a certain young fellow from Durand, Wisconsin (his name begins with a B) mushing through all two inches of it—just to keep in practice (it says here). Auggie was all right though and plays a great game of baseball.

Shortly after the cruising was started Dr. Hatfield arrived and explained what was to be accomplished in the Game Management course. Those things that so many of us had regarded as just "stuff" to be avoided, especially when reclining on the forest floor for lunch, now became prized "sign." Rare and prized specimens became the center of great bartering, and in some cases it was rumored that pilfering might have been practiced. A pair of fine young Great Horned Owls, subdued by one of the stalwarts of the Foresters' cabin, were placed in a cage in the front yard and served as a convenient medium for meeting many of the Sunday travelers, cyclists and equestrians. "Nebs" Zamor brought in a fine porcupine and capitalized very profitably on his continued supply of "sign".

Trips were made to the Wood Conversion Co. plant and to the Northwest Paper Mill in Cloquet for educational purposes. Both trips were marked by

considerable singing en route, from the back end of the station truck, yet the townspeople made no formal complaint and the only repercussion was a lot of sore throats.

Next came the Soils course under Dr. McMiller. Weigh sand, dry it in the oven, weigh it again, don't spill it; draw pictures of various crystals; dig peat from the bottom of the swamp when that on top is just as wet and cold; make holes in the ground at the nursery; dig a pit to sit in while you draw the horizon (ask any forester why); make acidity tests; throw white powder on the ground to get green grass—these were but few of the requirements of the course, with a report covering each project.

About this time the rest of the thirty-eight boys gave up and admitted their utter inferiority at the table in favor of that triple threat from Eveleth (reaching, stabbing, and downing), that wrestler of no mean ability, you have it—Hungry Hank Usenick. His lone ability would make a Tinker to Evers to Chance combination look sloth-like.

Little should be said about the thinning operations carried out for Professor Cheyney's Silviculture course because so much arguing was done on the ground that in the end no one knew just what method he had conformed to. Suffice it to say that Doug Parsons was the wildest man with an axe and Tony Squillace came out second best in his encounter with a saw.

One of the highlights of the quarter was the trip to Cass Lake, to view the skeletons of those of the previous Corporation who lost in their struggle against nature in the spring of 1939.

Silent prayers were offered for those braves—and the Corporation carried on in its study of "How To Stop Sleet Storms in March So You Won't Have Salvage Work To Do" or "How Far Will A Jack Pine Bend?" The Forest Service and Camp officials made the stay on the Chippewa a very enjoyable one and many saw for the first time the practice of forestry principles.

The annual Foresters' Dance at Cloquet was a howling success, with nearly every forester in attendance, in addition to many guests and lady friends. The affair was dedicated to Mom and she enjoyed it. A dating bureau was established well in advance of the evening thru the generous assistance of Mrs. Schantz-Hansen and the results were indeed gratifying. Some very lasting friendships were established—some lasting until 6 o'clock the next morning we are told, with some of the veterans who should have known better thumbing back to camp from Minneapolis. Everyone envied Ross Donehower (who was still at the station because he forgot to go home the year before and because—well you can't blame him with a girl like that) because he knew so many nice people and she danced nice too. "Gil" and "Skog" played wolf again while Pete

never did get over the rooking he got on his "blind-date". But it was fun.

These were but a few of the mentionables that we of the 1940 corporation enjoyed. Much could be written but you couldn't publish it so why write it. For instance: you couldn't say what Charley Larson said when he fell off the beaver dam into the pond; you can't describe the girls Warren and Pete took home from Kings; tell the story that Ken Peterson told about his early morning affairs; you couldn't describe how friends of the steward and president burst into Shang-Ri-La at 2:30 in the morning and the officers' weak explanation. It just isn't done. It would also be hard to write what the boys from the new cabin looked like every Sunday morning or why; you couldn't say where you'd seen Mike Latimer or who he was with; why Egeland was away every weekend but one, or when he did his washing isn't really known—all these things could be talked of but not written.

With all its fun, the corporation prospered and paid a sizeable refund. Traditions were carried forward another year and of most importance the competitive academic spirit so necessary to learning, manifested itself in the work accomplished and in the spirit in which it was done.

Chips

Much confusion and many heated arguments develop over the selection of a queen—especially a Home Ec queen. This controversy was present to the "nth" degree at our recent Foresters' Day election. But a forestry senior aptly expressed the clinching expression when he stated, "Boy, that Gorder gal for me! Did you see those 'pins' perform when the photographer came in?" Yes, we must agree—what shafts!!



FORESTERS' DAY, 1941

By DOUGLAS PARSONS

January 18, an unimportant date to the ordinary student, was of great significance to any Forester; for thereon was staged our 1941 Foresters' Day. Committees — for exhibits, for publicity, for contests, for refreshments, for dances, and for what-not — were organized so as to engender the proper nucleus and spirit. But a multitude of difficulties were encountered with finances leading the list and obtaining "main campus" publicity running a close second. Although Foresters are not, as a whole, influential in the *Daily's* inner circle, the problem was solved by "our friends"—the "main campus" engineers. Rumor has it that the engineers, seeking to degrade the high ideals of the Foresters, proceeded artistically to paint both water towers on the farm campus with the words, "FORESTER'S DAY, JAN. 18". Now from all ulterior views, it would appear that the Foresters stooped to this ignominious method of advertising; but how could any forester misplace an apostrophe, and also how could any forester execute such perfect lettering? Their ruse evidently succeeded, for the University authorities got awfully provoked and set the deadline for the removal of the paint at 5 P. M. on the same day. However, the Foresters, noted for their dexterity and purpose, removed the paint with time to spare — and with a hope that they might encounter those "in-ga-neers" in the near future.

Following tradition, an election was held for a Daughter of Paul, Son of Paul, and Uncle of Paul. Apropos of beautiful gals, none could compare to the aspirants for our "Daughter". The choice was indeed a difficult one to make; but, after decided campaigning, Marion Gorder was the recipient of this honor. Honored as Son of Paul was Robert D. Peterson, and to complete the clan, Professor R. M. Brown was elected Uncle of Paul. The Day was dedicated to Dr. Louis Rees — a professor we all respect and admire. "Chips"

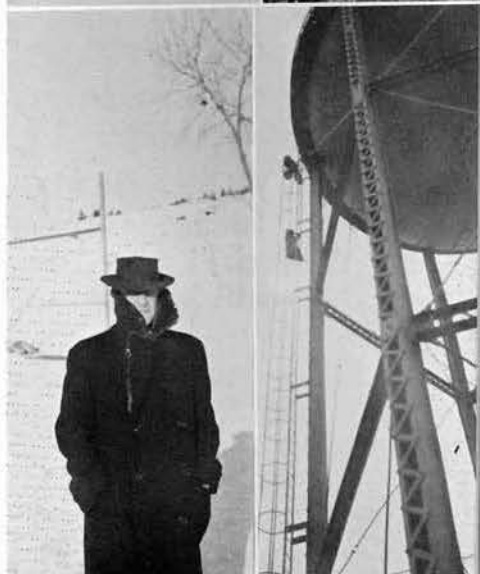
Rees has often walked off with the prizes in our chopping and sawing contests. He also deserves a prize for artistic osculations. Oh, Oh!

With the thermometer at 20° below zero, the activities began! First in line was the traditional bean feed in the Ag. gym. Even the stately Dean Blitz, Dean of all University women, was present; and she proved herself to be a Dean in all respects. We salute her! After too much food, all retired to the auspices of Green Hall where the dedication of the Day was made. Immediately following, a very interesting and humorous lecture was given by Tom Kelly, lecturer for the Minnesota game and fish department, who maintained a running commentary on sketched scenes pertaining to conservation. Walter Breckenridge, curator for our new Museum of Natural History, concluded the indoor program with a motion picture entitled, "Game Through the Season."

After adjournment to the contest field, Miss Gorder was crowned Daughter of Paul with the usual addition made. Dr. Rees gladly repeated his amorous gesture several times for photographs. And who wouldn't, if he were in that same position!

Chopping, sawing, pole climbing, skiing, snowshoeing, broom hockey, chain throwing, ax throwing, and a tug of war — these represented the contests of the day. A public-address system was the means for super kibitzing and booming announcements by the Chairman of the Day, John Wishart. Music was supplied to the tune of "Java Jive" and "Show Me the Way to Go Home." And may we say the latter was much more appropriate. Guess why!

Since it was our usual luck to have the temperature at 20° below zero, everyone, including Professor Cheyney with his 30 pound sheepskin, congregated around the large bonfire in the center of the field. Consequently, along with the wonderful heat, everyone absorbed great quantities of wood smoke on his clothes. This statement may be better emphasized by a little incident that happened to one of the boys just before the formal



dance at the Nicollet hotel that evening. This upstanding forester had entered a florist's shop to purchase a corsage for the girl of his dreams, probably a blind date. While he was waiting for the corsage to be made up, another gentleman entered the store and after a little sniffing bought some flowers. During an ensuing conversation, he asked the clerk, in all sincerity, whether or not they sold any of that smoked fish he had been smelling. Before an answer could be given, the forester received his corsage and quietly departed, taking the delicate aroma with him.

However, in spite of this distinctive "he-man" aroma, the dance went off beautifully — for most of us, at any rate. Old friends met and new friends were made. In fact everyone seemed ultra friendly. Peculiar what that stuff can do! During the intermission the Daughter of Paul presented awards to the contest winners. R. M. Brown and Bob Peterson kept clamoring for their

"awards", too. Mr. Brown's clamor was productive while Pete was a little reticent after all. He should have been, with his gorgeous girl friend staring him in the eye.

When the dance terminated, everyone departed — for where, no one knows. But they didn't all go home. Seems that Nebs Zamor and Marv Smith were gone until all hours, studying astronomy, I suppose. And no one knows what happened to Howie Osmundson!

Thus another Foresters' Day had ended. For some, this was the last of such happy occasions. For others, this was but a beginning. Speaking for those of us who are leaving school, we find it hard, indeed, to leave all this behind. All this fun, hilarity, and friendship! Gatherings with such bonds of fellowship are rare indeed. For myself and for all in our class of 1941, I may say that Foresters' Day is a celebration to be cherished forever in our minds and in our hearts. May it always live on!

Chips

We have heard it breathed around that the present crop of foresters are a bunch of softies; so we would like to attempt to refute this misconception. The present forester just goes in for high class brawling such as the Golden Gloves, the All Fraternity, and the All University boxing matches. For instance in the All Frat match, foresters, Gordy Maxson, Doug Chambers, and Tom Partridge came out first in their respective classes; in the All University matches they did nearly as well, for Tom took the division for the third consecutive year (he also won the N. W. Golden Glove championship as a heavyweight though he has never been more than a lightweight). The Division of Forestry has also supplied most of the freshmen wrestling coaches in recent years in the persons of Norm Borlaug, Bob Zabel, and Lief Lie. The foresters are not as crude and direct in their dealings with wayward engineers and such; when the engineers came over to paint our water tower for Engineers' Day, a few of the boys and a squad car showed them the error of their ways. But then perhaps an old-fashioned reception would have made a more lasting impression on the engineering mind(?) than a night in the jug.

Chips

Some time ago, in 1939 to be exact, Bob Schoensee wrote an article for the Peavey, entitled, "The Log of the Forestry Club Stops Rolling." At this time we are happy to report that the log of the forestry club is rolling again. This pleasant state of affairs is almost solely due to the initiative and drive of the Sophomore Class. These lads really get behind an affair and push it through to a successful climax. No matter what the task, they're willing to attempt it. Last year the Forestry Club held three dances—the Peavey-Minnecon Dance, the Foresters' Ball at the Nicollet Hotel, and the Timberbug Twirl. The Annual Bonfire was carried through in excellent fashion; and, of even more importance, the Student-Alumni-Faculty Banquet was resumed after a lapse of a year. More than a hundred were in attendance for this gathering. Under Doctor Schmitz's expert toastmastership, the laughs were many and not far between. Each speaker burst through with something novel and interesting. And even though most of the fellows had trouble using the correct knife and fork, the banquet may be surely termed a success.

Even with the enrollment decreasing, it is safe to say interest in the Forestry Club is increasing. Since this is an institution of student unity, may its ties grow stronger forever.



The Foresters' Annual Bonfire was again held in Shorty Roe's surveying pasture—even though Joe Finnegan's elaborate map, showing the location of "cords and cords" of firewood, proved to be nothing but a dream. Or else we can't read maps.

Under "Stinky" Anderson's bass guidance, the fellows led loose with some beautiful singing, and it didn't concern Indian maidens. Following this, Chairman, Doug Boardman, introduced the faculty members to our new Freshmen. To get into the spirit of things, each of the usually austere Profs. told his favorite story. Because of both space and ethical reasons, they can't be printed in such a solemn book as this. Stories of summer experience, of Cloquet, and of Itasca, were sources of fond memories for all of us. Refreshments helped the evening to settle smugly; and as the last embers of the fire dwindled to nothingness, many of us thought of the future—of the uncertainty, of the war, of our careers, and of our friends. This annual affair is now something traditional; it's a unifying device between all undergraduate students and our faculty. May it always be so.

FORESTRY AND NATIONAL DEFENSE

By ROBERT D. PETERSON

The GOPHER PEAVEY is an appropriate place to reprint the winning Pack Essay for 1941. "Forestry and National Defense," by Robert D. Peterson, was placed first among the fourteen essays submitted for this year's contest. The essay was one of several which discussed the responsibilities of the forestry profession in the national defense program. Mr. Peterson has brought out clearly the scope and importance of forestry in modern warfare at the same time that he has stressed that cardinal principle of the forestry profession—long-time planning and conservation.

MISS THURSTON, Section of Rhetoric

What place has forestry in national defense? Before attempting to answer this question, it is imperative that we qualify the term—forestry. Most American citizens have a completely erroneous impression of its meaning. They believe that foresters perform only three duties—plant trees, protect these trees from fire, and finally log the mature crop. "An enjoyable outdoor occupation for those who *prefer* that sort of thing." And they wonder, "Forestry in national defense?"!!

Forestry is a recognized profession. A profession now requiring five years of study in our leading universities. Graduate foresters are responsible for the management and perpetuation of vast timbered lands stretching from Alaska to Mexico, from Labrador to Florida. Their profession cannot be defined in any one sentence nor in any one paragraph; for it is as engulfing as the sea—encompassing any or all activities upon potential or actual wooded land, whether that land be desolate or populated, arid or swampy, barren or heavily forested.

The entire world is in a state of turmoil; for all of the nations on this earth

are either engrossed in the most destructive war of all time, or they lie in wait—fearful of the pending developments. Behind the front line scenes beat the hearts of these nations—the people, their activities, their industries. Wheels grind faster and faster as voices clamor for, "More output, greater production, more speed, more products." Never before has there been such tension, for the giants of defense are gigantic and relentless. One man, one industry, or one resource seems to be but a bagatelle. And our forests? How do they ameliorate our country's plight?

Too many of us view defense preparations only in terms of smoke and fire, in terms of ships and planes, and in terms of men and guns. But let us stop and ponder a moment. Our forests rank as one of the greatest natural resources on the North American continent. In all stages, from tiny seedlings to awe-inspiring monarchs, they extend over endless areas of mountains, hills, and plains. Wood and wood products from these forests are indispensable. This fact, widely recognized in peacetime, is especially true during war emergencies as illustrated by the statement in the

German paper, *Vorwaerts*, "To be without wood in time of war is almost as bad as being without bread." Many authorities agree that Germany's invasion of Poland was principally to acquire access to Poland's vast forest resources. This is easy to believe when we know that Goering, in his famed four-year plan, rates the forests of Germany as their second most valuable natural resource. In a similar manner, the forests in our United States are invaluable, for they stand ready to serve a multitude of uses in our defense preparations.

With the passage of the Selective Service Act, the mobilization and training of a huge American army began. For this program, wood in the form of structural lumber is needed and needed dearly. Lumber is a necessity for barracks, for hospitals, for dining halls, for garages, and for recreation centers. It is required for mine props, for ship decks, for wharves, for docks, and for bridges. During the last World War, over 6,000,000,000 board feet of lumber were utilized by the United States Army alone. Some idea of the magnitude of this amount may be gained by the fact that this is sufficient material to construct a boardwalk one inch thick and twenty-two feet wide around the earth at the equator. During the present emergency, the lumber consumption will undoubtedly be as great. In the event of the United States' entry into the War, the consumption will be enormous.

Statistics show that 17,000 soldiers will require buildings covering one square mile. The present plan is to mobilize and train 4,000,000 men during the next three-year period. Thus, with

somewhat over 1,000,000 men in the army at any one time, buildings must be constructed that will cover an aggregate area of 59 square miles. Even withstanding the cantonments' needs, there must be lumber for the homes of workmen, for the other varied wartime uses, and all this to be in excess of the ordinary peacetime requirements.

According to most authoritative sources, the ultimate victor in the present world struggle will be so acclaimed due to her supremacy in the air. Here again, wood and wood products shall be a deciding factor in that supremacy.

During the last World War, Sitka spruce was in great demand for the aircraft industry — for struts, for propellers, for wing ribs, and for fuselages. Today, this same species of tree is utilized in the construction of training ships. This may seem insignificant; but when we consider the multitude of planes that will be needed, the value and usefulness of this wood may be comprehended.

Research at the Forest Products Laboratory in Madison, Wisconsin, has opened entirely new fields for wood products in the aircraft industry. During the present industrial surge, these new developments are certain to gain prominence. Experiments in fabrication with resin glues are showing great promise of being useful for the wing and fuselage covering of airplanes. Plywood, due to this improvement in our glues, is also to play an important role. The Forest Products Laboratory can now mold plywood into practically any form desired. In addition, they report a new synthetic resin treatment of wood — a treatment which may find use in more

efficient propellor construction; for it has been shown that such wooden propellers are better able to withstand the high speeds of our modern pursuit planes.

Munitions and explosives are the mediums of deaths in wartime. We are not puzzled over this statement, but we do wonder as to the relationship of wood to bombs and bullets.

Chemically speaking, wood is composed of three substances, each one soluble in a specific chemical solution. They are termed cellulose, lignin, and pectin. Of these three compounds, cellulose is the most important and useful to man. During peacetimes, cellulose is used for a miscellany of items including paper, cellophane, rayon, and plastics of all kinds. During wartimes, cellulose becomes much more sinister but also much more vital; for it is used as guncotton for tri-nitro cellulose. The Germans use this wood cellulose as the main constituent of their high propellant explosives. Mixed with the cellulose are wood alcohol and other solvents. Solvents that are derived from fermented sugar which is produced from wood.

Dynamite was invented by Alfred Nobel in 1866 when he mixed nitroglycerin with sawdust. This deadly nitroglycerin may be derived from harmless glycerol which may now be obtained from ordinary wood. No doubt as wood technology progresses, new and even more astounding chemical uses will emerge into common knowledge.

As stated before, the Germans value wood as their second most important and vital natural resource. That nation fully realizes the *multiple* economic uses of wood as evidenced by the fact that one-

fourth of the total consumption of textiles in Germany is in the form of rayon; and that rayon is derived from cellulose, wood cotton, and wood wool. This was reported by Coleman in his article, "Wood in Modern Warfare." He also made the statement that about 20 per cent of the wood wool used in Germany during the past five years has been used in their army uniforms. Imagine, woolen uniforms partially made out of wood!

Food shortages appear wherever there is war. Amazingly enough, a sugar derived from wood may now be used as a food material for animals. With sufficient refinement it is actually fit to be consumed for human nourishment. Such astounding discoveries exemplify the place of wood and forests in our defense systems. We can see that many of the wood products used today were unheard of during the last war. One may daresay that they were undreamed of. Progress in wood technology and research has been the cause in the past and shall be the cause in the future of such new developments. For with all due consideration, we may safely say that derived wood products unheard of today will serve in the defense of America tomorrow.

Only recently, an entirely new plastic was discovered. This plastic, which is as inexpensive as any other similar material, can be molded into instrument panels, dial knobs, switchboards, and the other innumerable articles used in the communication systems of both branches of our armed forces. Strange to be true, but this plastic is made from mere sawdust and other former waste material.

The Forest Products Laboratory also reports that a new use has been discovered for lignin, one of the three components of wood. The improved lignin may now be used in storage batteries where it is incorporated with the negative battery plate. This fusion enables the battery to maintain its maximum power during zero weather four times as long as formerly. And lignin was a material which not so long ago was considered absolutely worthless.

Poisonous gases and smoke to be used in smokescreens are both being produced from acetic acid which is another wood product. Rosin is said to be used in the construction of heavy shells where it is employed to fill the spaces between the shrapnel so that the deadly missiles will be more evenly distributed in all directions when the shell explodes. But wood with all its multiple characteristics is also used to counteract death, as evidenced by the fact that the life-saving filter in gas masks is made from common wood pulp.

Wood pulp for newsprint and other paper is a necessity in our every-day life. At the present time, it has the additional feature of being pressed into containers for cartridges, shells, and food products. Such a statement appears unemphatic in itself, but the quantities of timber needed for this one purpose are tremendous. From all directions — by ship, by rail, by truck — logs come to the mill to be ground into pulp. Each year millions of cubic feet of timber go into these paper products. During war emergencies, with the requirements greater than ever, the quantity of imported pulp and paper is reduced, with the net result of a shortage

of raw materials. But this is not necessary, for with proper management the forests in the United States are more than ample to supply both the quality and quantity of timber desired.

Also due to a reduction in imported products, the essential chemicals may become scarce; but here again wood may be used for the derivation of a multitude of compounds including alcohol, acetone, acetic acid, mannitol, sorbitol, and glucose.

Only a few of the uses of wood and wood products have been mentioned above. No mention was made of the use of black walnut for gun stocks, of the use of wood fibers in parachute construction, of the use of turpentine in flame throwers, of the use of cellulose acetate in photographic film and shatterproof glass, or of the use of wood products as fuel for gas engines, trucks, and tractors. Indeed, it should require a book to have a list of wood uses in complete form. But that is not our object; for, remember, we only wished to point out how the forests enter into the defense preparations.

Trees require long periods in which to mature. The rotation of our common timber types is from one to three times as long as the normal life span of a human being. Thus, a timber crop cannot be raised over night. We must realize this fact; and, consequently, recognize that it is imperative to practice continuous rather than spasmodic forestry. In the past, our forest wealth had been taken too much for granted. All but a few "cynical" individuals had believed the forests inexhaustible. At the present

time, we behold the forest destitution due to that erroneous belief. In order to inhibit further needless destruction, forestry must become firmly established as a permanent, full-time practice—not

only to insure a supply of forest products for the present emergency but also for all future emergencies. Forests and forestry must stand together as a front line of our national defense.

Chips

About four years ago, an intramural athletic team was initiated and named the "Paul Bunyans". Since that time, this team has met with unprecedented success in the fields of touchball, hockey and diamondball. For the past three seasons, the "Bunyanites" have slashed their way to the crest of touchball fame on the Farm Campus. Last year, this team went all the way through to the all university finals—through a field of over 100 teams. They had won eight straight victories, losing out in the finals with a score of 12 to 9. The boys sure went out on the tear that night. When hockey season rolled around, the lads simply annexed that title as easily as could be, even though their opponents suffered a total of two broken noses. Diamondball is now the current activity, and from all sources, it seems as though they'll annex that title too.

In case you wonder who are the constituents of these marvels, may I cite their names in the following order: Ian Anderson, Norbert Zamor, Doug Parsons, Bob Peterson, Bob Johnson, Bud Moore, Ray Jacobs, Bob Nelson, Lowell Nelson, Rod Schumacher, Keith Hall, Stan Erickson, David French, and Dick Lavine. Let's hope the Paul Bunyans always keep the foresters supreme.

SHINE THE APPLE

(Dedicated to all loyal members of the R. O. O. A. P.)

*Oh, there is a college sport
Called—Shine the Apple.
Anyone, though tall or short
Can shine the apple
All you do is mount your horse,
See the "prof" whose got your course
And produce from any source
A polished apple.*

*Then you rub it till it gleams.
Yes, shine the apple.
And you shine it till it screams—
The poor apple.
Oh you dang near wear out its skin
Running out and running in
To see the "prof" whose course you're in
And shine the apple.*

*Oh, it is a noble art
To shine the apple.
You can't stop when once you start
To shine the apple.
When it gets near finals' time
All the boys get right in line
To produce a healthy shine
Upon the apple.*

*When you're feeling kinda blue,
Just shine the apple.
When you think you won't get thru,
Oh, shine the apple.
When the skies look kinda gray,
And although you hope and pray,
The marks don't come your way
Just shine the apple.*

(PORKY)

Forestry in Operation . . .



FORESTRY IN MINNESOTA:

POTENTIALITIES, ACTUALITIES, AND OBSTACLES

By ELLERY FOSTER

To what extent are forestry practices in operation today? To what extent are forestry practices to determine the future welfare of our peoples? We all ponder over these questions; for, truly, they are momentous. Ellery Foster, '28, presents a panorama on this subject. To be specific, he discusses the potentialities, the actualities, and the obstacles of forestry in Minnesota.

What are the potential benefits of forestry to Minnesota? How far are we from their realization? What stands in the way?

Here are three vital questions in which Minnesota foresters have a special interest because foresters are expected to provide expert advice on such problems, and because the forester's opportunities for service and employment are dependent upon the progress that is made.

The forest survey provides a partial basis for answering the first two questions.

About 40 percent of Minnesota's 50 million acres is classed as "forest land." This huge area varies in timber-producing quality from very good to practically worthless. Potentially productive forest makes up 17¼ million acres. Unproductive land — virtually waste land — makes up nearly 2½ million acres.

The forest land that is potentially productive could now, under a simple plan of timber management, support a current annual cut of 191 million cubic feet, which could be gradually increased to 395 million cubic feet at the end of 35 or 40 years, after the growing stock was built up. Under more intensive manage-

ment the allowable cut at the end of this period would be 585 million cubic feet¹.

The actual present cut? An estimated 161 million cubic feet annually, not allowing for increased activities that have resulted from the defense program. In addition, the total drain upon the forest includes 95 million cubic feet wasted by fire, insects and disease, making a total normal drain of 256 million cubic feet.²

Off-setting the present drain of 256 million cubic feet upon Minnesota forests is an estimated annual growth of 373 million cubic feet. This is not as favorable a situation as might be concluded, since the greater part of the growth is in low quality species and in trees of small size, while most of the drain is from species of higher quality and from larger trees.³

A great deal of the current growth needs to be left in the woods to build up depleted growing stocks, which explains why the current allowable cut under a simple plan of management is about 200 million cubic feet. It should be remem-

¹Cunningham, R. N. and Moser, H. C. *The Forests of Minnesota*. U. S. D. A., Forest Service, 1938, pages 79 to 81.

²Op. cit., page 93.

³Op. cit., page 75.

bered, too, that this amount of cut is only "allowable" *provided* the cutting is adjusted to the timber which is ready for cutting and leaves the young timber to grow.

In terms of jobs, we can estimate conservatively that a yearly cut of the potential amounts would provide work in timber cutting and hauling six months a year to 23,000 men under the simple plan, or to 35,000 under the intensive plan, assuming the same ratio as at present between volume of timber cut and men employed. This is in comparison with 9,600 in the present operations.⁴ Six-month rather than 12-month employment is used in the estimate because logging and log-hauling are largely seasonal activities, integrated more or less with farming and work in the recreation "industry". The above figures are conservative to the extent that they do not take into account the labor of cutting and hauling material cut for fuel and fence posts, which at present provides additional work equivalent to 12,000 men full time, and which probably could continue at least at this level under an effective forestry plan.

Primary manufacture of the logs and bolts into lumber, paper and other products would employ perhaps 7,000 men on a full-time basis under the first plan, and 11,000 under the second (compared with present 3,000).⁴ Secondary manufacture would provide additional jobs, but to keep the estimate conservative,

let us omit them.⁵ Let us also omit the additional jobs of services and supply which would be created within the state by the purchasing power coming from an expanded timber industry. Although we omit these two items from our estimate, however, we should not forget them or overlook the way in which the production of a basic material, such as timber, provides a basis for secondary manufacture and also creates a purchasing power that stimulates the demand for many other goods and services, thus providing a basis for increased production in many lines.

Let us also forego, to be brief, any statistical estimates of the benefits of wildlife production, recreation and watershed protection that would accrue from a good program of multiple-use management for the 20 million acres of forest land, as well as figures that might be developed on the benefits of farm shelterbelts to the prairie and other sections of the state.

So we are dealing specifically with only the timber production side of forestry, at the same time keeping the other benefits in mind.

The benefits in terms of numbers of jobs in the timber business alone would obviously go a long way toward putting Northern Minnesota back on its feet, getting the region "off relief". A boon to the cut-over section is also a boon to the rest of the state and nation as well, because both the state and federal governments are pouring in large sums for

⁴Data on present employment were supplied by L. E. Peterson, of the U. S. F. S., Division of Forest Planning.

⁵According to an analysis of census data by the Forest Planning Division of the U. S. F. S., secondary manufacture normally provides work opportunities roughly equivalent to the combined employment in woods work and primary manufacture (excluding fuel and fence post operations).

relief that would not be needed if the timber economy were built up. Federal relief of various forms is now going into northern Minnesota at the rate of \$33.40 per capita per year as compared with \$17.10 in the balance of the state.⁶ The state itself is putting in millions for various forms of relief, proportionately much greater than to other sections. In its present condition the region needs this aid. The point is that restoration and wise use of its basic resources is the way toward permanent rehabilitation, giving the people dependable opportunities for productive employment and income.

Actually, of course, achievement of the full potential benefits of Minnesota's forests is not something that will come merely by waiting 40 years. That is approximately how long it would take if a truly comprehensive forest program is developed.

In spite of the progress already made, there are many obstacles yet to be overcome in developing such a program. Today, firewood, brush and other cover of little timber-producing value predominate on more than 4 million acres. Young reproduction and saplings too small for cutting—mostly aspen, birch, and jack pine, with some pine and spruce—occupy 9½ million acres. Second growth stands of cordwood size of the same species cover 4½ million acres. Second growth sawtimber stands occur on 1¼ million acres. Remaining old growth sawtimber in 1934 predominated on only slightly more than one-third of a million acres.⁷

⁶Unpublished data obtained from Forest Planning Division, U. S. F. S.

⁷Op. cit., page 4.

Destructive logging methods still prevail on private lands and on most of the tax-forfeited lands. Then there is a heavy loss of merchantable trees that die and rot in the woods because of planless cutting that leaves some stands to stagnate while others are devastated. This loss usually is charged to insects and disease, but for most of it the initial cause of loss probably is over-crowding, with the insects and disease finishing off the weakened and dying trees.

The full benefits that might accrue from current timber operations, in terms of community stability and economic security for inhabitants, are not now being realized for a number of reasons, including the transient nature of logging and lack of coordination between the timber economy and other activities of the forest region (such as farming and recreation).

Some of the major obstacles are those involved in handling the 5 or 6 million acres of tax-forfeited land. The counties are working with the job, but they need the help of experienced foresters, and so far they have not obtained it in adequate degree.

Public programs set up to work on forestry problems have been stymied in many ways. The CCC and WPA, for instance do not yet have access (except for fire protection) to much of the land where they could do their most constructive work, such as tax delinquent land and land privately owned. Such programs that might go a long way in forest restoration are directed toward less fundamental types of work because federal and state forestry agencies and county auditors lack either the legal

authority or the necessary personnel and funds to develop forest work projects for much of the land on which such work is needed.

The cause of Minnesota forestry also is hamstrung by the rut in which the state legislature is bogged down, year after year appropriating millions for temporary relief to the cut-over region, at the same time postponing the increases needed for long-time rehabilitation thru conservation.

One of the major hurdles in this connection is the inadequacy of present forest fire protection. There are parts of northern Minnesota whose people are not convinced that fires can be controlled. And present fire-fighting facilities do not lend confidence. Minnesota is not prepared for the really bad year that comes periodically. Feeling that devastating fires of that sort are bound to occur, some of the inhabitants cling to the frontier attitude that the forest is a menace and must be removed or heavily pastured in order to protect towns, homes, barns, livestock, and human lives. This view has been expressed privately to friends of the writer by leading farmers in the Cloquet area, for example.

The foregoing are what we might call policy and program obstacles. When it comes to getting action in overcoming these obstacles, we run into some different kinds of obstacles. The whole contemporary social, economic and political predicament in which we operate presents one class of obstacles to forestry. The world has been moving almost too fast for us, and as a result there has been a good deal of confusion in deciding what to do.

We are not yet fully out of the era in which many people believed that the fullest and wisest use of resources would result as a matter of economic law from each individual doing his best to "get ahead in the world." Although we have been moving into a phase where people feel a need for their government—federal, state and local—to take an increasing role in bringing about coordination to achieve the best use of resources, little more than a beginning has actually been made, and there is still considerable doubt as to how much control there should be, and what form it should take.

Today the demands of defense bring new pressure to exploit forest resources—lumber for cantonment construction, defense housing and other purposes. Unfortunately, there seems little likelihood that in this rush steps will be taken to introduce forestry principles into the accelerated timber cutting unless by some miracle federal, state and local officialdom finds time to develop more adequate conservation policies at the very time when all are so deeply engrossed in the urgent problem of producing for immediate defense needs. Therefore, important as conservation is for long-time defense, the prospect we face is considerably more forest waste before conservation is introduced on much of the private lands and on the public land.

Then there are obstacles growing out of the popular attitude toward science. People have seen science achieve such miraculous things that the less informed seem to believe science eventually will be able to do almost anything—that it may even make forests and other plant growth unnecessary as a source of raw

material. It raises a question of the scientists's responsibility to inform society on the limitations as well as the possibilities of science. Certainly no responsible scientist who has studied the situation would recommend a do-nothing attitude toward forestry, because there is little prospect now of replacing the growth of forests and other crops as a source of organic raw materials. But many people apparently fail to realize that such limitations exist.

The fact that forest destruction has in many places exhausted the resources which might have continued to provide opportunities for employment and industry are often lightly brushed aside by such blind believers in the magical powers of science.

There are also obstacles arising out of our domestic economic plight. One of these is the economic pressure exerted upon local governments and people of the forest regions to wring the last penny of current revenue out of the woods without heed for the consequences. For counties and townships burdened with debt and the high cost of public services, it has indeed been hard to take more than the short-time view.

Another is the insecurity of the tenant farmer or the farm owner who does not know how long he will be able to hold onto his land, as payments on mortgages and taxes become increasingly difficult. Such economic pressures on the farmer, as on others, tend to create an attitude of simply wanting "to get by," and are a stumbling block in the way of long-time planning for resources, including forests.

The farmer also is faced with difficul-

ty in obtaining full value for timber that he cuts from his own or public woodlands, and that does not make him any more enthusiastic about forestry. Little has been done to develop cooperative timber marketing or other means of improving the income from woodlots to the farmer.

Some of the obstacles to forestry progress in the state may be traced to us foresters ourselves. There is apparently among forestry agencies a tendency to feel that forestry must be entirely centralized in one or a very few agencies dealing specifically with forestry. This attitude, I believe, works to delay the healthy growth of forestry policies and programs in other agencies which exert various degrees of control or influence in the management of land resources, such as the credit set-ups, and various parts of the agricultural program. Foresters, it seems to me, should be encouraging and assisting such agencies in developing their forestry activities.

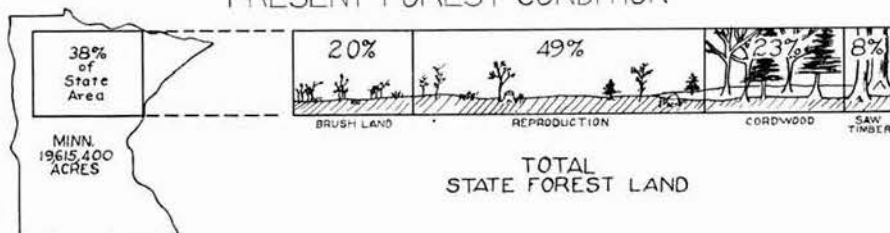
What this all adds up to, as I see it, is not that the forester should sit back and wait for the confusions and maladjustments of our times to be ironed out by someone else. If people generally—including foresters—fail to help solve these basic problems, there is danger that they will be "solved" by a little minority for its own purposes, with little regard for the rest of us. We have that oft-cited case of most of Europe as a bad example. Rather, it means that the forester must probe into broader economic, social, and political problems as well as forestry, serving as a responsible citizen with a stake in society in addition to being a technician.

We must re-examine the age of specialization with a skeptical eye. Forestry is a specialized field, needing trained specialists. But it also is an integral part of our social and economic structure. As such, the cure for many

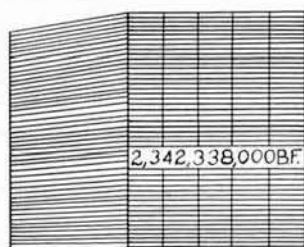
forestry ills is intimately bound up with much broader problems, both affecting and depending upon them, just as the recovery of a sick organ in the body of a man and the general health of the body as a whole are interdependent.

MINNESOTA FORESTRY

PRESENT FOREST CONDITION



FOREST INDUSTRIAL TRENDS LUMBER PRODUCTION



1899

95,973,000 B.F.

1938

?

1975

POTENTIAL WOODS WORK & PRIMARY MFG. EMPLOYMENT

Present potential; under a simple forestry plan	Allowable annual cut Cubic feet EACH LOG REPRESENTS 50 MILLION CU. FT.	Labor-in units of 6 month work EACH MAN REPRESENTS 9,500 MEN
After 35-40 years of simple forestry plan		
After 35-40 years of more intensive forestry plan		

Employment estimates are based on approximate ratio between timber cut and labor employed in present operations, but do not include the work of producing fuel wood and fence posts which now aggregates the equivalent of 12,000 men full-time, and which may continue at about this level.

THE FIT FORESTER

By O. M. EVANS

What are the attributes of a good forester? Which personality traits should be emphasized and developed? Mr. Evans, Head of the Division of Timber Surveys in Region 5, presents his views on this subject — views obtained during the course of thirty years' experience in the Forest Service.

Washington, D. C.,
March 14, 1941.

When the editor of the *Peavey* wrote me asking for something with regard to the qualifications of a Timber Cruiser and how the student may acquire all the desirable virtues, my first reaction, due to a lack of time, was not to comply with the request; but afterwards the following story occurred to me. One hot day, a farmer was plowing with a mule and an ox. During the day the ox lay down in the traces. The farmer calmly unhitched the ox and completed the day with the mule. That night in the barn the repentant ox inquired of the mule what the farmer had said. The mule replied: "O nothing much." "O come now," replied the ox, "be a good fellow and tell me what was said." "Well," replied the mule, "he didn't really say much. He only muttered something about the butcher." I don't want to meet up with any knife-wielding butcher.

As the subject assigned is rather limited in its scope, I am going to change the word "Cruiser" to "Forester"; because cruising is merely incidental to the forester's vision of keeping the forest green, of protecting and encouraging all forest lands whether they be for growing trees, forage, watersheds, recreation, or whatnot. By way of introduction to a *Peavey* audience, I'll say that I've worked in the California mountains since 1910, primarily on timber surveys, land

classification, forest insect control, fire fighting, and at a miscellany of forest activities. During that period I have directed the work of approximately six hundred forest school graduates and near graduates, in addition to many lumberjacks, fire fighters, and the like.

At the very beginning, it may be desirable to state that it seems to me a forest school should have in its student body and on its teaching staff only top material. Means should be at hand and used to bar or eliminate a larger proportion of the unfit, the inept, the intellectually dishonest, the indolent, the laggard, the weakling, the unreliable, the crab, the crafty, the touchy, and the bungler. The registrars should refer all long-winded formulae gimlets to the mathematical department. In the field, the highly intellectual, the too sensitive, the know-it-alls, and the intolerant are unhappy; and they should all be left at the outer gates — utterly. Every other form of life, except the human, shuffles off its worthless. The technical apparatus of I-Q's and personnel tests are well known and should be used. Why, a cop in my home town of Berkeley designed a machine to catch a person telling an untruth, and it works. Without these groups of misfits, who will not be your associates or among those to whom you look for guidance, you can go along through your college course without carrying an undesirable

load. I speak frankly; for when American forest school students and their friends can not speak their minds fully in their own publications, it's just too bad. Where else should one turn? In the Sierra you become a realist; for there is nothing more real in this whole world than a Sierra canyon — there is no pretense here. We have too many pussyfooting foresters, too many tiptoeing on eggs; and we have admitted into the Society of American foresters too many termites. And there is one "conservationist" seeking too much political power. Only a Chapman or a Pinchot speak out. Who will catch up the trailing banner? Who is there to meet the challenge?

The road a successful young forester must follow is not an easy one. It leads up from life's flat valleys through the foothills and into the mountain fastnesses. There is a steady grade all along the way, with but few level or easy stretches. There are many steep pitches and sharp turns; at times dust, mud, storms, and fatigue; ah, but on either side of the road there stands the forest, with rank upon rank of beautiful trees full of light and beauty — beauty in form, in color, in motion, and in sound. Light sifts down through a leafy canopy; there are exquisitely formed leaves and trees; all shades of greens — browns and reds too; songful birds, deer treading softly, and the motion of every branch and branchlet reacting differently in every breeze. Higher up are fragrant brush fields, meadows, springs, and flowing water; while near the end of the road and on the mountain top are glorious vistas.

Did you want something practical? Well, first you must have an attribute

that is to a considerable degree inherent; so label this Number One. That is a keen power of observation. Have hope, for the trait can be developed. When working in a forest, you must take notice and fix the mind on everything about you. You must observe the workings of the laws of nature. Sometimes a degree of temperature too high or too low, or an excess or lack of a few drops of moisture may entirely eliminate a species from the mountain side. Trees don't like soils derived from serpentine rock. Some trees want light and plenty of it; others demand shade. A Show and Kottok observed all the possible fire hazards. They saw hazard conditions in their true light and noticed things the other fellow didn't see at all. An Ashe found out that manufacturing too small a log was a financial loss, and a Mason developed selective logging. You must observe land forms, tree habits, surveying practices, and how best to handle tree-measuring instruments. In the forest you are working with a complex biological entity, the like of which there is nothing in the whole wide world. Sometimes its life cycle goes through thousands of years. In its innumerable gifts to mankind it stands out alone. President Condra of Nebraska University, a long and fast friend of the forest and foresters, recently gave us a talk at the American Forestry Association meeting in Washington, D. C., showing us diagrammatically how almost every science, natural and humanistic, has a hand in building up and maintaining the forest — all the way from paleontology, geology, botany, zoology, chemistry, physics, and on up to economics, sociology and philosophy. These are the very foundations of successful forest management.

If you are to observe, understandingly, the action and reaction of all the influences in the woods, you must study the sciences faithfully, with the above subjects as a basis. You can easily develop this power of observation. You should always be reflecting, be careful and mindful, don't miss or neglect anything. Walk through a forest — at the far end jot down what you have observed — come back slowly, and check up on what you have recorded. The rest of your forest life you will have to everlastingly keep at the job of observing. Your so-called sense of direction is nothing but observation.

The second attribute you must possess is the ability to analyze the multitude of related facts — you must be an analyst. The phenomena that you observe must be seen in their true relationships. The forester observes that this thing happens and that thing follows. He knows that there are five fundamentals which control the occurrence of all plant life — soil, moisture, air, light and warmth, and looks for the effect of each of these factors on every site. His mind may run through a possible hundred reasons why the forest is as it is. Being an analyst, he does not guess nor have a hunch. He uses the facts to develop principles, and from these principles he can draw conclusions. He must then have the force of character to put a workable plan into effect. To sum up — he has observed a set of conditions; he sizes up all the relationships; and then decides what is to be done; how he is going to do it; and, most important of all, *does it*, and in a systematic manner.

The third attribute you must possess, and here is what separates all of us into the lower and upper income brackets,

is the ability to draw sound conclusions. It's summed up in just one word — judgment. Drawing the wrong conclusion gets people into trouble; drawing the right one leads them up into the seats of the mighty. One uses a wrong word or inflection and fails. The other uses the right word and inflection and succeeds. A world figure begins his addresses with a honeyed "My Friends" and is swept on to victory. It's as simple as that. The practical aspects of timber cruising have already been described far better than I can do it. You can find this subject treated in many books and pamphlets. However, if none are available, you may find in your forest school library, the California Region Timber Survey Manual.

Success in forestry, in the final analysis, is up to the individual; but a lot depends on your getting into the right forest school just as being a social success depend on your meeting the right people. Choose half your academic work for the subject, the other half for the men who teach. Look over the graduates of the various forest schools, and see what kind of men they are and what they are doing. Weigh up the forest school heads and their associates. Beware of the teacher who just lectures, gives out lessons, and corrects examination papers. A robot can give a lecture and assign lessons, and they now have machines that can correct examination papers better and far more quickly than any professor. Find a school where both facts and human relationships are stressed. If you do not enter and leave a class-room with an elevation of the spirit, you'd better look for another teacher, a different forest school, or find out what's wrong with

yourself. You want inspiration and words of advice from those loyal to the forests and forestry. The purpose of a school should be to teach you a little, stimulate you immensely, and drill into you sound habits of working and thinking. Go where you will find the ability and wisdom of a Schmitz; the scholarly standing and integrity of a Mulford; the stimulating force and snap of a Graves; find a teacher who is as aggressive and persistent as a Chapman; with the dry humor and likeableness of a Cheyney; the energy, enthusiasm, and charm of a Newins; the persistence and tenacity of a Winkenwerder; as reserved and scholarly as a Dana; the deeply sincere and analytical mind of an Illick; and as keenly observing and high-minded as a Korstian. Class-rooms and equipment are important, but the man makes the school. Consider Filibert Roth. The many facts that he told us are largely long since gone, but the force of his character and advice lives on. There he stands, talking easily and intelligently, a kindly look in his eyes, rubbing his thumb and forefingers together — in his home you were a guest at ease. He filled us with enthusiasm, idealism, and held up before us the spirit of fairness and liberalism.

Yourselves? Here are a few traits you should develop. Read them over slowly. Honesty and industry — so essential to a cruiser, loyalty, courage, punctuality, stability, tact, and affability. Learn to give and take and have compassion on others. Compel your mind and body to obey you — boss them absolutely. Keep your standards high, and learn to loaf a little. Don't be a narrow specialist; don't hug to the school books

too closely; but stray through the city and into the forest, enjoying and learning from nature itself. Mr. Pinchot, in the old days at Ann Arbor, told us that a good forester must first be a good American; and to be a good American you must read the newspapers, current magazines, and good books. You must go out among your fellows, and acquaint yourself with the people that live in the forest. Only part of your education is gotten in the class-room and laboratory. He urged us to fight for the forests and against those who would destroy them for gain, and that principles are always more precious than profit. His advice still holds good, as I recently heard him in Washington voice the same ideas with his old fire and vision.

When you come to the forest, don't look like a cowboy, a sheepherder, or a lumberjack (all fine men in themselves), but look and dress like a forester—clean cut, clean shaven, determined, and competent. Keep in mind that being a forester, you work at both a trade and a profession — both noble activities; and that you intend to do a good job of protecting, tending, planting, measuring and selling the forest values. Develop as a strong river like the Klamath, which starts up in Oregon's springs, rivulets and swamps, and works its way down into California, cutting and gouging its way through the great Siskiyou Mountain range, flowing surely and serenely to the wide calm of the Pacific. Values, whether physical or spiritual, must always be struggled for. When you wake up in the morning, try to think of something to laugh about and remember, "In the mud and scum of things, something always always sings."

HOME-GROWN FORESTERS AND THE MINNESOTA LUMBER INDUSTRY

By H. G. WHITE

Today, many young foresters wonder what place industry reserves for them. Herein is a solution with particular reference to the lumber industry of Minnesota, as presented by H. G. White of the Lake States Forest Experiment Station.

A native Minnesota forestry graduate with a bent towards lumbering and a desire to work near home is likely to become quite discouraged at employment prospects in the State, especially if he follows the usual line of attack without putting his imagination to work. His first instinctive move in the search for a job is probably in the direction of some large sawmill. But this approach does not carry him very far nowadays, for large sawmills are practically non-existent in the State.

The latest available reports for Minnesota (1939) show only four sawmills cutting over five million board feet annually. One of these is owned by the Chippewa Indians at Redby. Another is cutting out a few scattered private tracts of old-growth pine in northeastern Minnesota. Two are box factories using chiefly aspen. There are also 12 sawmills in Minnesota that cut between one and five million board feet annually, but these are not the large-scale mills that the ambitious graduate imagines himself managing some day. (See table).

Two large outfits that were operating in northern Minnesota until recently have dismantled their sawmills and will hire portable mills to saw any timber that they may log in the future. Two

other box factories, that until recently sawed most of their own requirements, now buy lumber from small local mills and from the West.

Likely as not, the graduate-in-search-of-a-job ignores this shift to small sawmills and any significance it may have. Instead he takes the next instinctive step in his job-hunt which is probably a series of letters to western and southern companies applying for a chance to work up from mill hand to superintendent or sales manager. If his application is accepted, the State of Minnesota sees him no more, at least until the next depression comes along and wipes him off the company payroll; or he returns as a local sales representative. If he does not land a job, his hopes of carving out a career in the lumber industry are so shattered that he drifts into some other line of work.

A graduate with more than average perspective may, as a last step, investigate opportunities for employment in Minnesota lumberyards. He will learn from the latest available census reports (1935) that there are 61 wholesale distributors of lumber and construction material in the State and 958 retail lumberyards, with 3,396 employees, and an annual payroll of \$4,435,000. Retail

NUMBER AND ANNUAL PRODUCTION OF SAWMILLS IN MINNESOTA
1899 TO 1939¹

Year	All Mills		Mills Cutting Over 1 Million Board Feet		Mills Cutting from 50 Thousand to 1 Million Board Feet	
	Number	Production M bd. ft.	Number	Production M bd. ft.	Number	Production M bd. ft.
1899.....	447	2,342,338	109	2	338	2
1919.....	355	699,639	43	636,966	312 ³	62,673 ³
1929.....	207	357,180	20	322,759	187	34,421
1936.....	183	123,002	16	77,926	167 ⁴	45,076
1938.....	227	95,973	14	44,874	213	51,099
1939.....	326	111,218	16	47,595	310	63,623

¹Source: U. S. Census reports. 1939 figures are preliminary data by the Lake States Forest Experiment Station.

²Production not shown by size of mill.

³Including 25 mills cutting less than 50 thousand board feet.

⁴The Forest Survey coverage of small mills in Minnesota in 1934 disclosed 1,138 cutting less than 1 million board feet annually, including 639 cutting less than 50 thousand board feet.

sales totaled \$31,767,000 in 1935. Here is certainly a large enough field of activity to satisfy the ambition of a college graduate.

Although starting pay is usually quite low, employment in a lumberyard and perhaps ultimate ownership of a small yard probably offer as much economic security as can be found anywhere under present-day conditions. More than this, the lumber and building material field offers an opportunity for genuine community service. Distribution and use of lumber are fraught with many unsolved problems of local and national importance. Over a period of years lumber consumption has declined, and yet housing shortages are becoming increasingly acute. Ownership of anything more than a flimsy cottage is out of reach of people with low income. Urban families with incomes of less than \$2,000 per year, which includes at least 75 per cent of American families, get

only 25 per cent of the new houses built each year. The remaining 75 per cent of the new houses go to the 25 per cent of American families that receive over \$2,000 annual income.¹ Stated in different terms, there is need for about 320,000 new houses each year that would sell or rent for less than \$30 per month, but only about 13,000 new houses are built annually in this rental class.²

Providing homes for these people would open up a tremendous new market for lumber. Various methods have been suggested for building cheaper, but serviceable homes. More use of local timber, especially of the lower grades, thus eliminating expensive freight hauls, may be one answer. Prefabrication may be another. Self-help housing is a third suggestion — encouraging under-employed people to build their own homes.

For the student interested in this line

¹Taken from *What Does the Housing Program Cost?* U. S. Housing Authority, 1940. Chart, page 30.

²Taken from *Hearings Before the Temporary National Economic Committee*, Part 11—Construction Industry, 76th Congress, 1st Session. Government Printing Office, 1940. Exhibit 847, page 4977.

of work, training in pure forestry or wood technology is probably not enough background, but should be supplemented with courses in business methods and architectural engineering. However, forestry training seems to implant in many students a longing to live closer to the woods than does the average lumber salesman and yard employee. This is especially true of the native "home grown" forester who has his roots deep in the soil of Minnesota. Such a man will never be happy without the ring of the axe and the whir of the saw in his ears; and the smell of fresh sawdust in his nostrils. Fortunately these things can still be found in Minnesota at a thousand small sawmills, and at five thousand small logging operations. The day of the big logging operator may be gone forever, but the small logger and small sawmill are just beginning to come into their own.

The timber resources and industries of Minnesota reached rock bottom about 1932. Since then there has been a gradual recovery. The Forest Survey of Minnesota, completed in 1934, showed how rapidly the regrowth of the forests is proceeding. But Minnesota's new crop of timber has not brought recovery to the large sawmills, for they cannot handle small logs economically. There has been much speculation as to how the low-grade second-growth timber could be utilized. We have dreamed of new chemical uses of wood that would skyrocket the market for aspen, birch, jack pine, and other less desirable species. In the meantime, the small sawmill and small logger have been working out a partial solution to this problem by

trial and error, without technical assistance. This is where a "home grown" forester should find his niche, if he has a genuine interest in the proper care and use of his native forests. In the past, few foresters have entered this line of work; but the future will probably see more doing so because of the shift to small operations requiring little capital, because of the increasing volume of public stumpage being placed on the market, and because it offers a real opportunity to do practical forestry work.

As a matter of fact, the cutting practices of one logger may have more real influence on forest conditions than the work of a CCC camp of 200 men. On the basis of the cutting reports that each logger is required to make to the State, it is estimated that there are over 5,000 logging jobs in Minnesota every year, mostly very small. Unfortunately current logging practices are nearly as destructive as the logging of early days. Some of the best second-growth timber in private hands is being cut prematurely before it is big enough to yield a reasonable profit to the logger. A forester with a good head for business and adequate training in logging engineering should be able to conduct an efficient and profitable logging business, and at the same time put the forest in good growing condition.

There is infinite room for improvement in methods of logging small timber. Most of the felling, bucking, peeling, and loading is done without mechanical aid. The peeling and loading is particularly slow and arduous work when done by hand. Just because the mechanized methods used for big timber are

inapplicable does not mean that some phases of the small logging job cannot be efficiently mechanized.

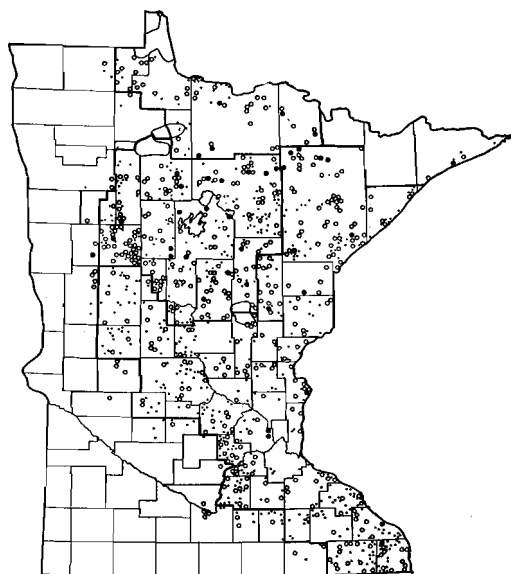
Although more than half of the timber cut in Minnesota is used or marketed in rough form, such as pulpwood, mine timbers, poles, posts, and fuel wood, it is at the small portable sawmill that the most difficult problems of how to use low-grade timber are being met and at least partially solved.

Small sawmills are not a new development in Minnesota. Before steam power was widely used in the mills, the size of plants was definitely limited by the available water power. Even after the general adoption of steam power the small mills continued to cut for local markets. Portable mills were first made possible a good many years ago by the development of steam tractors as a source of power. More recently the use of gasoline and diesel engines, particularly discarded automobile engines, has brought second-hand sawing equipment within the purchasing power of any farmer or settler who has sufficient need for it.

Census figures indicate that the small mills are taking over a larger and larger share of the milling (see table). According to these reports there were just about the same number of small mills operating in 1939 as in 1919, and their production was about the same, but they accounted for 57 per cent of the output in 1939 as against 9 per cent in 1919.

However, the census records do not give the whole picture because they do not cover the smallest class of mills, cutting less than 50 thousand board feet annually, and because it is difficult to get reports by mail or even by personal

contact from all transient portable mills cutting over 50 thousand feet. In connection with the Forest Survey of Minnesota in 1934, an intensive canvass was made of substantially all the mills in the State. The result of the canvass of small mills is shown on the map. The final total was 1,138 mills cutting less than one million board feet each in a normal year: 499 cutting between 50 thousand and 1 million board feet annually and 639 cutting less than 50 thousand annually. In 1933 these small mills accounted for 58 per cent of the State production of lumber and ties. By all indications there are probably more small sawmills operating today than there were in 1934.



LEGEND
• 300 TO 1000 THOUSAND FEET, BOARD MEASURE
• 50 TO 300
• UNDER 50

Portable sawmills have often been condemned by foresters because of the way in which they are used to strip the better trees from second-growth stands just as soon as they are big enough to log. But under the direction of a forester, the portable mill becomes a useful

tool in forestry work rather than a destructive agency. Because it can be moved cheaply from place to place and will cut small timber economically, the portable mill can make profitable salvage cuttings of scattered old-growth timber, as well as selective cuttings of second-growth.

However, the portable mills as currently operated can stand a world of improvement. Many of them are inadequately powered and poorly equipped. The result is low efficiency and badly sawed lumber. Losses due to improper piling and seasoning are high. Thus, few of the mill owners are in a position to sell lumber that is sawed, seasoned, and graded to compete on an equal basis with western and southern lumber. Many of the small operators must sell their mill run of lumber, unseasoned, at a minimum price in order to meet current expenses. As a result few of the mills pay more than the minimum wages required by the Fair Labor Standards Act. Many of them fall below that level. They are also negligent in carrying compensation insurance and in paying social security taxes, thus running the risk of being forced out of business by a serious accident or by penalties for failure to carry compensation insurance or to pay taxes.

At first glance the small sawmill business may not seem to spell opportunity for the forestry graduate. However, there is no reason why a practical "home grown" forester, with a bent in this direction, could not earn a reasonable living in this line of work if he can build up a little capital with which to get started. One word of caution: This is

not a field in which to launch one's own business hastily. If possible one should first get a good dose of practical experience on other operations.

Small sawmilling and logging may not be an easy way of making a living, but to the forester who has his roots in the northwoods of Minnesota it offers a challenge: A challenge to conduct an efficient logging and milling operation, a challenge to prove that good forest practices pay better than bad practices, and an opportunity to lead the way in the proper utilization of Minnesota's new crop of timber.

OUT THERE

*Do you hear that?
That's the wild geese calling.
And that over there?
That's a Bluejay crying.
Doesn't it get in your blood,
And make you feel like moving?*

*Come on, brother, put on your boots,
Grab up your pack and gun,
We're starting on the long hard trail,
We'll soon feel the strain of tump and beat of sun.
Remember the old tote road
And the "Kimbo" deer run?*

*We'll go up past old "Trapper Al's",
And maybe gab awhile,
Then we'll head for "Owl Hoot" camp,
It's only another mile.
It will all seem really peaceful
When the tea comes to the boil.*

*Most folks think we're queer, I guess,
But they will never know,
The feeling of peace and security we get,
In the places that we go.
It makes you feel real good inside,
Out there so near to God,
And it really seems a shame
That they will never know.*

BOB NELSON (Class of '44)

SOME NORTHEASTERN MINNESOTA FARM AND FOREST FACTS

By A. D. WILSON

North Eastern Minnesota, with its thousands of acres of tax forfeited and tax delinquent land, presents a serious problem to foresters. Problems of correct land use must be solved. Mr. A. D. Wilson, of Bemidji, Minnesota, gives us some interesting facts on this situation. Since this state of maladjustment is found over much of the United States, this article is of genuine interest to all of our readers.

To have a fair understanding of Northeastern Minnesota problems and resources one must know something of the past sixty years history of the area.

Sixty years ago little was known of this part of the state except that it was a vast wilderness with apparently unlimited timber resources. The farming areas of the state to the south and west and the cities were developing rapidly, and much timber was needed. Hence, the first development here was around the timber industry. Logging and the manufacture of lumber required much labor, also food and feed. The demand for labor and the opportunities to acquire free land by homestead attracted many settlers.

Some homesteaders took up land chiefly for the timber on it; others gave more thought to farming possibilities.

Soil was generally productive of vegetables and hay crops, which products found a ready market in logging camps and saw mill towns. If the homesteader was short of income from his land he could easily get a job in some phase of the timber industry or could find a ready market for timber products from his own land. Harvest fields in western Minne-

sota and North Dakota also furnished profitable seasonal employment.

These opportunities made possible and general a fair degree of prosperity. Taxes were low because very little public service was required. Schools and roads were necessary, but requirements were modest and only moderately expensive.

About 1910 the general feeling seemed to develop that the small one room school with inadequate heating and lighting and only moderately trained teachers was no longer suitable and that better schools were needed. About this time automobiles came into use and brought with them a demand for more and better roads.

Most of the land in these forest communities was then paying taxes; much of it was held by speculators and timber companies, anxious to sell. Timber had been largely removed, and it was expected that the greater part of the cut over land would be acquired by settlers and be developed into farms.

The desire for better roads and schools and the hope of encouraging more settlement led many communities to build more and better roads and more and better schools. Like other typical Ameri-

can communities, many of these partially developed timber communities made these improvements largely on borrowed money.

It is generally considered that it is easier and more popular to borrow for such improvements than to levy taxes and pay for them as built. The general prosperity caused by the first world war and the rapid increase in land values added still more demands for more and better public services, causing a great increase in taxes. It was easy to borrow money and in spite of temporary prosperity increased taxes were unpopular; hence more debt was accumulated.

Then the Depression

The depression, so far as agriculture is concerned, followed shortly after the world war. Land prices began to decline. The demand for land declined; taxes increased. Vast acreages of undeveloped land brought no income. Many land owners were hard pressed to pay taxes; others became discouraged and quit paying.

Present Situation

Two tables are present below to show the approximate tax status and present use of the 19,000,000 acres of land in the fourteen cut over counties of Northeastern Minnesota at present:

TABLE I.
APPROXIMATE TAX STATUS

Condition	Acres	Percent
Tax Exempt	5,000,000	26.3
Forfeited	5,000,000	26.3
Delinquent	4,000,000	21.1
Paying	5,000,000	26.3
Total	19,000,000	100%

TABLE II.
PRESENT USE OF LAND

Use	Acres	Percent
New in Farms*	3,000,000	15.8
Wild Life	16,000,000	84.2

*Of the land in farms about 1,000,000 acres are crop land.

No Plan of Land Settlement

Minnesota has had no real plan of land settlement. In Northeastern Minnesota this lack of plan has resulted disastrously to at least 20,000 families, who located unwisely and were forced to abandon their land and leave without chance or hope of reward for their years of effort. Besides the discouragements and loss to these settlers, haphazard settlement has brought hardship and loss to many other settlers and very difficult financial problems to many counties, townships, and school districts.

The major problems to Northeastern Minnesota may be briefly stated as follows: High tax rates, tax delinquency, forfeiture of land for taxes, bonded debts, scattered settlement, and high costs for public service.

Land Use Studies

Since half of this vast area of land is again back in public ownership and largely under the control of state, county and township officials, a very serious attempt is being made by these officials to profit from past experience and plan for a better way of handling land in the future.

The following facts have been proved by the past fifty years experience.

1. Some of the land is good farm land and offers good opportunities for farmers.

2. Some of the land is not suitable

for farming, at least under present conditions, and will be best used for growing timber and other conservation uses for some time to come.

3. In spite of all the waste in harvesting the original crop of timber, there are millions of feet of good merchantable timber and much more is growing.

4. There are thousands of beautiful lakes and streams which make certain areas very attractive to tourists, hunters, and fishermen.

5. Past experience has shown that thousands of people from other parts of the state and from other states like to come here for vacations and sports.

6. The above facts indicate that Northeastern Minnesota has three important enterprises, namely, *agriculture*, *timber*, and *recreation*.

The job ahead is to take stock of what we have, profit by past experience, and aim to use all our resources in land, people, and capital to the best possible advantage.

What Has Been Done

Eight counties have already completed land use studies, with all of the available facts before them. Township committees have classified all land for its best use, based on their own intimate knowledge of their townships gained by living and farming there for ten or more years.

Three counties have taken the next step by zoning their counties, thus legally controlling the use and occupancy of all land.

These measures are resulting in the consolidation of settlements in the better

farming areas, considering soil and location, and are preventing indiscriminate settlement in areas not suited to farming or where costs of such services as schools and roads will be excessive.

It is likewise resulting in the consolidation of areas to be used for timber and recreation so these areas may be better protected from fire and trespass and with limited public expense may contribute most to the general welfare.

Cooperation and Results

The federal government, the state, counties, townships, school districts, and local citizens are all working together in this cooperative enterprise. Those who know Northeastern Minnesota best believe that these studies, facing facts as they are, and the gradual working out of the proposed remedies, will have the following results:

It will materially improve the lot of present farmers in the area by bringing into use the best farm land, opening favorable opportunities for many more farmers resulting in consolidated farm settlement where reasonable public service may be had at a reasonable cost.

It will result in the gradual return to normal timber production of millions of acres of land now largely devoid of timber which will provide an important part in the income of the area.

It will make more attractive the whole area for vacationists, sportsmen, and lovers of outdoor life, and will add millions of dollars to the income of this part of the state.

THE FORESTER

The forester is an amateur woodsman with a college education.

There are two classes of foresters. One class believes in keeping abreast of those dynamic movements that challenge the best efforts of the nation's thinkers. The other class fights fires, builds truck trails, plants trees, and wears old clothes.

Some foresters have offices, some live in Washington, and some work in the woods. Lots of foresters spend practically their entire lives in God's great out-of-doors. They love to hunt and fish. They would, too, if they only had time.

It used to be said that a forester's best friends were his horse and his axe. Today a forester has no need for a horse, and he might cut himself with an axe. Years ago most every forester wore a big Stetson hat, and carried a gun on his hip and a flask in his pocket. Nowadays big Stetsons are worn only in the movies, and you hardly ever see a forester carrying a gun.

An interesting thing about a forester's life is that he meets all kinds of people from hoboes to multi-millionaires. It is not uncommon for a forester to have the privilege of personally doing favors for a millionaire tourist. However, there is no record of a millionaire tourist ever doing a favor for a forester. But even if they don't make much money, it's nice steady work and they have lots of fun.

Another satisfactory thing about the forester's career is that he is his own master, absolutely independent and answerable to no one for his professional conduct. That is, except to his wife, ladies' garden clubs, sportsmen's associations, nature lovers, newspaper editors, and local politicians.

Forestry is a very pleasant profession because it is so easy to get ahead. Many foresters graduate from college with only a few debts and immediately get a job and a wife. In about ten years time in addition to the same job and the same wife, they have more debts and five kids. That's why foresters are so happy.

Timber in Use . . .



ALUMNI NEWS

CLASS OF 1899

H. H. Chapman writes for his Peavey from New Haven where he continues in the role of Professor of Forestry at Yale University. Mr. Chapman says that two more years will see him on the retired list and that he then will be able to devote all of his time to the accomplishment of projects shoved aside during the strenuous activities of teaching, field work, and other professional lines of endeavor. He says that, perhaps then, he can write a text-book on Forest Finance that the average student can assimilate without "hoping he'll meet that guy some dark night." H. H. also expects to bag that big buck that got away from him the last time he went hunting in Itasca County.

As a special note, Mr. Chapman writes that the widow of Professor S. B. Green is living at 1949 Lewis Mt. Road, Charlottesville, Virginia, and would greatly appreciate hearing from any of Professor Green's former students and friends.

CLASS OF 1909

Walter M. Moore is still at Wright Field—the research, experiment, and procurement center for the Army Air Corps; and the place is really humming now. They are erecting a wind tunnel with a 40,000 H. P. motor and two huge forty foot fans to provide wind (not hot air) of any desired volume. Maybe, if things progress as they have been lately, we'll be seeing you there, Walt, (as buck privates). The Peavey staff is deeply indebted to Mr. Moore; for every year, as unfailingly as the sun, he sends his check for \$4.00.

CLASS OF 1910

J. B. Berry is still growing citrus, about a million and a quarter boxes last year, and he has a fine time doing it. His Waverly Florida Co-op. service gives its members a fine grove care service, as well as a nice profit. J. B. writes that son, Jim, Jr. was married last summer; congratulations. We wish that you would take that long dreamed of trip back here to Minnesota for that reunion while Green Hall is still new and bright. J. B. also extends an invitation to any of the "bunch" who head his way to come directly to "Waverly, where you will be among friends."

Chas. L. Lewis, Jr., is another member of the class of 1910 engaged in pleasing the palates of discriminating foresters and gourmants—he manages a few hundred acres of cranberry marsh which produces those delicious Eatmore Cranberries. Mr. Lewis divides his time between Beaverbrook Wisconsin and St. Paul.

CLASS OF 1911

W. H. Kenety encloses his check from Fitchburg, Mass., where he is affiliated with the Fitchburg Paper Company. W. H. was very pleased with the news letter we sent out. He also wishes happiness and success to the 1941 grads.

CLASS OF 1912

John A. Stevenson encloses the cold cash for his Peavey, and tells us that he is still with the Bureau of Plant Industry in Washington, D. C.

CLASS OF 1913

C. H. Wiggin was one of the first to send in his dollar for the 1941 Gopher Peavey. He is still stationed at the Robinson Agricultural Experiment Station, at the Substation in Quicksand, Kentucky.

CLASS OF 1914

S. A. Graham inquires of the awesome creature that is being goaded with a peavey on our postcard. To quote Mr. Graham: "The drawing on your card stirs my imagination, at least to the extent of wondering what the fearsome creature may be that is being poked with the spear-like peavey. It looks as if said peavey might better serve as a prod for the elephant (or is it a sacred bull?) than for handling logs."

"As usual your inquiry finds me in the midst of teaching forest entomology, forest ecology, forest zoology, and herding about a bunch of graduate students in their mental girations at the University of Michigan School of Forestry and Conservation. That peavey(?) might come in handy sometime in connection with the above activities. (Not the magazine but the instrument that is sticking the quadruped.)"

"The last couple of summers have found me investigating the why's and wherefore's of the hemlock borers in the Upper Peninsula of Michigan. This work has resulted chiefly in showing up the borer as an incom-

petent individual that can't even kill a hemlock, the real culprits in this case being a combination of bad weather and bum (I should say ill advised) logging procedure."

"This next summer I hope to study the ecological history of some more or less virgin stands still left in the Porcupine Mountains. Perhaps there we shall meet this most peculiar animal pictured on your post card. At least I'll keep my eyes open for it. All that I can say is please pray that I see him first and that a tree is nearby for climbing purposes. That beast is a bad actor if the expression in his eye means anything."

The Peavey staff is sure that you can handle the beast, Mr. Graham. It's only dear old Babe.

CLASS OF 1921

H. L. Person reports that he is still working at the California Forest and Range Experiment Station and is in charge of timber management research in the redwood region. There has recently been established a redwood experimental forest which will provide a center for selection field work. He also reports that Bill Hallin is working with him on the project. Leydon Erickson is now in charge of the products work at the station. Last fall the fellows got together with H. Hamilton, who is in charge of the seasoning work for McCloud River Lumber Co., for an informal reunion.

A. E. Wackerman sends in the perennial dollar from Durham, North Carolina, where he is listed on the records as Professor of Forestry at Duke University.

CLASS OF 1925

R. B. Thomson writes us from Duke University where he is doing his best to make forest economics interesting and realistic to a bunch of undergrads. We thank you kindly for the dollar, Mr. Thomson.

L. G. Baumhofer encloses his check with the notice that he is still with the Bureau of Entomology and Plant Quarantine in Washington, D. C.

CLASS OF 1926

Warren W. Chase, once a Peavey staff man himself, is now chief of the Regional Biology Division of the Soil Conservation Service in Milwaukee, Wisconsin. His job enables him to keep tab of what a number of Minnesota foresters are doing, and his conclusion is that the old motto, "Minnesota men make good," is still being followed.

Ralph M. Lindgren encloses a \$2.00 check for two subscriptions to the Peavey. Ralph is with A. D. Chapman and Co. at New Orleans, Louisiana.

CLASS OF 1927

J. Lee Deen is now on his third year in Colorado as Dean of the Division of Forestry. He finds that the commercial phase of forestry is of much less importance than are protection, recreation, and grazing. Carl Krueger, Ben Whitehall, and Dayton Kirkam are all located nearby if one does not care what he says. Carl is on the Shoshone in northern Wyoming; Dayton is on the Montezuma in southwestern Colorado; and Ben is on the White River in northwestern Colorado. So to visit them, Lee must cross a desert to find Carl, and cross the Continental Divide to see Dayton or Ben.

Carl G. Krueger is located in the Shoshone National Forest and hopes to be there for some time to come. He sends us his best wishes and a dollar for his usual copy of the Gopher Peavey.

Ernest Kolbe has been shifted from the pristine glories of the Pacific Northwest to flood control work with the California Forest Experiment Station.

CLASS OF 1928

Ellery Foster, as you have seen, was kind enough to write an article for the 1941 Peavey. The staff deeply appreciates this, Mr. Foster. As for news, Ellery tells us that he is Planning Assistant for the Bureau of Agricultural Economics in Washington, D. C. He divides his time between Washington and the seven most westerly states in advancing the work of cooperative planning for agriculture. In the broad sense, that includes forestry as a part of agriculture.

W. H. Fischer states that he has been recently transferred to the Regional office at Atlanta. W. H. sends his regards to the Profs. and wishes the Peavey staff luck. We need it.

Frank Kaufert has been with us as Associate Professor of Forestry for a year now. Mr. Kaufert is a real asset to any college institution and we hope that we can keep him on the list of Minnesota's assets. As a teacher and as a friend Frank is hard to equal.

Merril Deters writes from Michigan State College at East Lansing. Mr. Deters con-

tinues in his status as Forester in the National Office of Xi Sigma Pi fraternity.

E. J. George is employed at the U. S. Field Station at Mandan, North Dakota. He also included the password for a copy of the 1941 Gopher Peavey.

CLASS OF 1929

John Neetzel is now located at Dukes, Michigan—still with the U.S.F.S.

A. Dale Chapman is, of course, the Mr. Chapman of A. D. Chapman and Co., which is of course the company that distributes an awful large amount of Dowicide. Mr. Chapman really helped the Peavey staff a great deal with his full page ad for the 1941 issue. Thanks a lot.

CLASS OF 1930

Ralph W. Lorenz says that he is still occupied as Associate in Forestry at the University of Illinois. He also states that last summer he and Mrs. L. had the good fortune to visit, as Ralph put it, "ye old grad" George Herion, then stationed at Santa Fe. George proceeded to show the timber types and cutting operation as of the Santa Fe area. The Herions have two girls and one boy (Cactus Tom).

Clarence D. Chase was back "home" last fall for the Minnesota-Michigan football game. It warmed the cockles of his heart to see that final score: Minnesota—7, Michigan—6. They sat with Michigan friends, you know. Their welcome was not too cordial, though; for they were marooned two days at Becker by the famed Armistice Day blizzard. Clarence saw many familiar faces at the Society of American Foresters trip to Isle Royal last September.

Arvid Tesaker is still working on soil and moisture conservation work for S.C.S. He reports that his job consists of planning farms for soil and moisture conservation programs: contours, rotations, fertilizing, pastures, tree planting, woods improvement, and wood management plans. Arvid moves around so much we never do get his address straight.

Harold L. Mitchell is Senior Forest Service Representative on the Upper Susquehanna Flood Control Survey, with office at 139 Court Street in Binghamton, New York. We hope that you like your new job.

Carl E. Benson is the District Ranger of the Chickasawhay District of the Desota National Forest. We find that Mr. Benson

is the U.S.F.S. representative on the Chickasawhay Conservation Commission—a group of business and professional men who are cooperating with the public schools, the American Legion, industry, and the Forest Service in a fire prevention program. Such a movement exemplifies the progress that is being made in our educational approach to the fire prevention program. We're proud to see a Minnesota grad on the front line in this program.

Rolland C. Lorenz sent us his check from the Doctors' Hospital in Washington, D. C., where he was trying to shake off a bad case of malignant malaria. Rolland had just returned from an eight months' trip through South America and Central America where his party was studying the possibilities of developing rubber areas. We certainly hope that you're feeling fine again, Rolland.

CLASS OF 1931

Lyall E. Peterson encloses the following quip for the Peavey which serves to illustrate his description of Forest Land Planning: "Forest Land Planning might be described as part of a necessary process for synthesizing facts and designing ways and means for making conservation mean as much as possible in terms of food, clothing, shelter, and other needs of good living." Lyall's title is now Assistant Chief of the Forest Land Planning Division. He admits that the Division hasn't made history, yet; but they promise it.

Weston Donehower is with the Soil Conservation Service at Lancaster, Pennsylvania. Reports are that Wes was finally felled by Cupid's darts. Congratulations.

Alf Z. Nelson, who is still with the Division of Forest Economics at Washington, reports that he renewed acquaintances with a number of Minnesota men at the S.A.F. meeting there. There is another mouth to feed in the Nelson household—a daughter, Judith, born June 11, 1940.

A. E. Schneider writes that he is still in the R-9 Division of Operation doing staff work on general administration planning and management. Here is some dope on some of the "henchmen" of the class of '31: Robley W. Hunt is Refuge Manager for the Fish and Wildlife Service at Necedah, Wisconsin; he is married and has one daughter. Paul St. Amant is District Forest Ranger at Blackduck, Minnesota; he too is married and

has one son. **Jerome Stoudt** is Wildlife Staff assistant on the Chippewa, at Cass Lake; also married and one daughter. **Bob St. Amant** is District Ranger on the Kabetogama District, Cook, Minnesota. Bob is the proud papa of one son. And **Jim Bussey**, '38, is a Border Patrolman down at Raymondville, Texas. Just married!

Stanley Buckman gave his dollar to the Editor way last fall when he attended the annual Foresters' Bonfire. Stan is still located at Louisville, Kentucky, with the American Creosoting Co.

Maurice W. Day sends his dollar from the Dunbar Forest Experiment Station in Sault Ste. Marie, Michigan. Just made the deadline.

CLASS OF 1932

Howard B. Smith is with the U.S.F.S. in Pinedale, Arizona.

CLASS OF 1933

John A. Rundgren sends his dollar, and at the same time acclaims last year's edition of the Peavey. John is with the U.S.F.S. in Buford, Colorado, and was waxing his skis in anticipation of the elk census when the letter was written, last January.

Victor O. Sundberg requests that we mail his copy of the Peavey to the Spring Valley Ranger District, Kaibab National Forest, where he is the District Ranger. Vic says that **Harlan Johnson**, '33, is still harassing the deer on the Kaibab North Unit, **Howard Smith**, '32, is the Pinedale Ranger, and that **Harold Tysk**, '32, is with the Division of Grazing in Albuquerque, New Mexico.

Donald E. Price has been spending a part of his time getting acquainted with saddle horses (so-called) and pack mules in connection with the administration of his ranger district which does not have a road in it and has an altitudinal range of 6000 feet in the same horizontal distance.

CLASS OF 1934

George A. Herion was recently transferred from Santa Fe, New Mexico, to the Regional Office of the Indian Service in Phoenix, Arizona, where he is Associate Forester. However, 90 per cent of his work is in the field, and he states that there is nothing "swivel-chaired" about that.

Henry H. Hanson continues as an instructor at Green Hall; while he works for his Doctor's degree, Mr. Hansen plunges the

boys both in his Protection class and field trips in Dendrology. We're all wondering when Henry is going to get married. With such a nice looking girl, we marvel how he procrastinates. Late Flash: Wedding bells rang at Easter.

CLASS OF 1935

Norman O. Nelson reports to us that he is still plugging away at the same old job with the Forest Service. Thanks for the dollar, Norm.

Arthur E. Ferber is still employed as Nursery Manager, Division of Soil Conservation Nurseries, at Mandan, North Dakota. He reports that his daughter, Judy Ann, was two years old in April. Three Minnesota men whom he sees quite often are E. J. George, Donald Baldwin and Walter Paul.

Donald Baldwin is working with the Soil Conservation Service at Fessenden, North Dakota.

Roy M. Carter is Extension Forester at the University of Wisconsin College of Agriculture. Roy said it was too late to write a good news letter, but he did send for a subscription to the Peavey. Thank you, Roy.

CLASS OF 1936

Raymond C. Nermoe encloses his check and the following information: He continues in the capacity of Sub-District Officer, planting trees for the Prairie States Forestry Project out in North Dakota. When Ray left school, he began his career as a range worker in the Bad Lands. In the spring of '37 he transferred to the P.S.F.P. and has been with it ever since. Ray would appreciate a visit by any of the Minnesota fellows. He is justly proud of his shelterbelt.

S. V. Sihvonen, at the time of his enclosure, was praying for the rains to stop so that they could get back into the swing of log and pulpwood production. It seemed Crossett Timber and Development Co. was barely a jump ahead of the sawmill and pulpmill in their logging activities. Sulo reports that the Yale Forestry School class passed through Bastrop on their annual trip. It was a real pleasure, he says, to see the old "Siberian Bushman," **Onni Koski**, again. Onni was in good hands, traveling with **K. L. (kissable lips) Binger**. (That's the way the Southern gals feel toward him.)

CLASS OF 1937

Richard C. Smith sends his best wishes in a tangible form and tells us that he is still

with American Creosoting Co., as forester affiliated with Georgia Forest Products Co.

Bernie D. Peterson replied to our newsletter with the good old dollar. Bernie tells us that last summer he joined the Ancient Order of Benedicts. He is at River Falls trying to help the farmers keep their farms at home.

Martin Meldahl is still working for the Heimbach Lumber Co. in Duluth, and has had a very busy year. He has also built himself a new house and has installed a partner (married Miss Harriet Ekern, Home Ec., last November 9th). Martin says that he will feel hurt if anyone who is up his way does not stop in and see them. He also writes that Farquhar "Sparky" Thomson, '37, was also married last year to Miss Lulu Green, Home Ec.

E. Arnold Hanson gives us the important news that he has now received a Junior Foresters' appointment—working on Administrative Fire Studies and enjoying it immensely. Arnold says that he plays golf on Saturday and skis on Sunday. What a country!

Ted Myron is working for the S.C.S. with headquarters at CCC Camp Ellsworth. Most of his time is spent on erosion control farm planning for the Pierce County Soil Conservation District. He reports that, although far removed from studies at the Alma Mater, his work is interesting and very necessary in that section of the country. Ted has not only done well on the professional front, but also on the home for he has added a boy to his family since we last heard from him. Ted reports that in the S.C.S., Jack Fry, '33, heads the Jackson County S. C. District, Al Laidlow, '32, heads the Pepin County District, and **Bernie Peterson** is planning farms in Pierce County with headquarters at River Falls. Looks like the Minnesota Foresters have taken over the S.C.S. in Wisconsin.

James N. Fisher has been working for the Wisconsin Conservation Department in the Protection phase as Forest Ranger in the Black River Falls area. Jim spent one entire year as a Cooperative Ranger giving talks and showing pictures to women's clubs, sportsman's organizations, and schools. His spare time has been spent putting out fires and condemning the Protection courses or lack of them as they are taught in school.

Scott Pauley spent last summer working at Black River and then took a job as instructor at Michigan State. We're happy to have the "jug" too.

Raymond Jensen is another of the Minnesota boys doing graduate work at the present time. He's up at the Cloquet Forest Experiment Station groping for light in a research problem.

Clem Kaufman has almost finished the work on his Doctor's degree. Between study periods, Clem acts in the capacity of Assistant Extension Forester at the University Farm. Too bad we can't mention where the Editor saw Clem one night. (What was the Editor doing there?)

Dwight Bensend is still one of the "boys" at Minnesota. Still working on jack pine, and students in Dendrology and Wood Structure lab sections. Please note his corrected address in the directory.

Alvin T. Hagen believes in the slogan, "Be a forester and see the world." He and Mrs. Hagen have moved six times in the past two and a half years—from coast to coast and back. In June of 1940 their moving days were supposedly over, so they built a new house at Mt. Shasta only to find that they must move again, this time to the Lassen Forest at Susanville, California. We hope that you are nicely settled now, Al.

Roy A. Johnson is on the Nicolet National Forest in Wisconsin. He says the following Minnesota foresters are also on the job there: **Lincoln A. Mueller**, **Robert Colby**, **Dick Hultingren**, **Warren Livens** and **Gustav Linstrom**. Roy expects to be drafted in May or June, and he predicts that the draft will take the majority of unmarried before the year is out.

CLASS OF 1938

Edwin Saarnio encloses his annual stipend for the Peavey, but no news. We hope that you enjoy this year's issue, Ed.

Carl R. Dion sends more than his dollar (\$1.50) plus some news notes. Carl is Junior Forester on the Grand Portage Indian Reservation. He is charged with the welfare of 300 Indians as well as the management and protection of the forest. He states that **Herbert Norman**, '38, and **Marvin Harmon**, '38, are both working on the Red Lake Indian Reservation, Red Lake, Minnesota.

Phil C. Anderson gave in to our "gently urgin" card. He describes his experiences

since graduation in a novel manner. "1938—USFS, Bitterroot National Forest, Engineering staff (pick and shovel stuff). 1939—New England Timber Salvage Administration (lumber grader of New England knotty pine). 1940 and up—Rilco Laminated Products at Albert Lea, Minnesota. (Michigan sales representative—traveling salesman with 'one' in every port). 1942—Hitler, here I come!!

E. S. Sedlacek asked that his Peavey be forwarded to 812 Smith Tower, Seattle, Washington. No further news, but we have heard that Ed has a good job with the N. P. Railroad in their timber department. We hope that we heard correctly.

Bob March encloses, along with a dollar, the information that he has a new job; with the Fuller Goodmanson Lumber Co. at their branch at Marinette, Wisconsin. Good luck on your new job, Bob.

Phil Schroeder is still striving for that high degree in Forest Entomology. But we hear that Phil is going to the Army—not as a private, either. Please note benefits of the R.O.T.C.

Ray Wood had better watch himself in the dark alleys. While doing graduate work, Ray corrects exam papers in a multitude of forestry courses. On the side he courts a pretty blonde now and then. Good old Ray!

John S. Mead is working for the Day and Zimmerman engineering firm in Burlington, Iowa. John says that he hasn't forgotten that the engineer is the lowest form of animal life from a forester's viewpoint. We don't mind having a forester working as an engineer as long as he remembers.

CLASS OF 1939

Bob Schoensee writes us from Linden, California, where he is working with the Diamond Match Co. We thank you for the buck and hope that you like your new job. Perpetual inventories are almost equalized.

Russell Johnson completes his work for his Master's degree this spring here at Minnesota. After that, he is lined up with a new job.

Chas. White has been enlightening the farmers on the benefits accruing from properly handled farm woodlots. If you want any dope on farm woodlots or farmers, write Chuck in care of the Lake States Forest Experiment Station.

George Boyeson has acquired a private office, two or more telephones, and one or more secretaries. How about the loan of a blonde for a couple of weeks, George? His title, at the last report, was Assistant Auditor at Montgomery Ward and Co. in St. Paul. When next year's Peavey comes out it will be General Manager of all stores.

Edwin Mietunen spends his daytime hours as engineering aid for the Minnesota State Highway Department, and his night sleeping(?).

Keith White reports that he is working for a retail lumber company in Bremerton, Washington. Thanks for the buck, Keith.

Phil Jahn has been doing his part in helping Uncle's defense program; he has been surveying for a powder plant down in Iowa, but hopes to be back in the bush by June. Late flash — Phil is now in the Army as a draftee — Batty. 215th CA(AA), Camp Haan, California. Hear the Bugle?

George E. Gustafson liked last year's Peavey. Thank you, George. He reports that he is working for the Wisconsin Conservation Department at Gordon, Wisconsin. We hope you like this year's edition as well.

James O. Folkestad is a Junior Forester Foreman in the Black Hills National Forest. He says it's a great country and that he likes it immensely. Jim also tells of a new boss—a wife acquired last December. Please accept our belated congratulations, Jim.

Alden Wuoltee sends us his "best wishes" and a dollar for the Peavey from Ft. Bragg, California.

Erick P. Kienow has been helping clean up after the hurricane in New England and has worked with the Northeastern Timber Salvage Administration at Worschester, Mass., The New England Forest Emergency Administration at Southbridge, Mass., and is at present with the Northeastern Forest Experiment Station at Alfred, Mass.

Charles E. Hutchinson is still holding out at the Ceco Steel Products Corporation, Sheet Steel and Wire Division, out at 28th and East Hennepin. "Hutch" planned to visit the Peavey den for a few minutes not long ago, but a poker game turned up. So he lost \$2.00 instead. But since Bob De Leuw won \$2.25, the foresters broke even. There's a moral to that story. "Hutch" also reports that John Sweeney, '40, is working

for the Lampert Lumber Co., **Bob DeLeow** is working at the Anderson Sash and Door Co. in Bayport, and **Bill "Duke" Dugas** has the Northwest agency for the Car-Life Oil Filters. O.K., Hutch?

Clarence T. Eggen sends his buck from the Coweeta Experiment Forest in Otto, No. Carolina. No further information.

Howard A. Post writes us from the Harvard Forest in Petersham, Mass., where he is working for his Master's. His study concerns the natural regeneration and succession following the hurricane of 1938. Howie ran into the Yale quartet of **McQuire, Binger, Condit, and Olson** at the S.A.F. Meeting in Washington. The Staff hopes you find your questions answered in the Peavey, Howie.

CLASS OF 1940 .

Ross Donehower reports for both **Tony Perpich** and himself who are both with the Indian Service in the Southwest. To quote: "Originally, there were twelve of us, with a full time director. Now there are eight in the S.W., one in So. Dakota, and three have either resigned or dropped out. Tony was sent to the Apache Reservation about 100 miles south of us. I was assigned with three others to the Navajo reservation. My work has been fascinating. Upon arriving at this agency, we four aides took a thousand mile tour of the reservation which is 25,000 square miles in area; then after spending some time getting acquainted with the agency office, we were sent out to act as a flunky for a cowpunchin' range rider. I had two fine nags, and rode from 25 to 65 miles a day. I'll never forget the first day's ride of 20 miles. Then we came back to the office, and have been here ever since. The work consisted of activities in the fiscal division, forestry, and range management." The Peavey staff knows that Ross will be successful in whatever he does. Was that head shave worth \$5.00, Doc?

Eldon Behr is here at Minnesota on a fellowship from the American Creosoting Company, working for his Doctor's Degree. Between times, he burns up the diamond, playing second base for the grad's team.

Bob Binger writes us from the Yale School of Forestry where he is striving for an M.F. Degree. Bob mentions the trip to the deep south and "umpteen" reports. We heard about that trip from someone else, too.

Ralph Nelson is struggling with the facts and figures of forest taxation here at Minnesota. "Satch" received a fellowship at Yale for another year's study. Congratulations, Ralph!

George E. Olson is one of the Minnesota boys studying for his Master's at the Yale School of Forestry. He is specializing in Forest Products. It appears the poem, "They were whoopin' it up at the bar," applies to some of our Minnesota representatives.

Lem A. Blakemore is acting as a Research Collaborator in the Food Habits Division at the Patuxent Research Refuge in Bowie, Maryland. On frequent visits to Washington, Lem sees **Vince Olson, '40**, and **Walt Erson, '40**, who are both working for the Dept. of Commerce and live at 2122 P. St., N.W., Apt. 31. In addition, **T. E. Maki, '30**, is the head of the new Forest Experiment Station which is located on the U. S. Experimental Forest at Laurel, Md. Lem frequently inquires about the Voyageurs. May we say they are functioning better than ever.

Bob Helgeson has landed a job with the St. Paul and Tacoma Lumber Company at Seattle where **Norman Jacobson, '10**, is the forester. Like it better than picking apples or clerking, Bob?

Laurie Kallio is a template maker for Lockheed Aircraft Corp. at Glendale. What these foresters don't do. Thanks for the buck, Laurie.

Gordon Condit admonishes us to give the Cloquet Corp. a good writeup. Hope it pleases you, Gordy. He reports that his time is divided between slaving over his thesis at Yale, and Eli Whitney Forest business for Pop Hawley. We think Minnesota is a pretty good school, too. We know what Gordy means by "slaving".

Jim Michels sends the required greenback but encloses no news. Thanks for the buck, Jim.

Doug Welch is being kept on the run by his job with the USFS as infiltrometer operator on the Coast Flood Control Survey in Georgia. Hope you like the Peavey.

Forest Olson writes to the Staff from Iron Mountain, Michigan, where he is employed by the Ford Motor Company—in the line of wood working machinery. Forest looks

forward to his 1941 Peavey; he likes to hear of school functions, activities, and of what the other grads are doing. He says he is a married man—and likes it very much. Of course!

William Lehmkuhl was only recently with the Greenheart Lumber Company at Georgetown, British Guiana. According to Bill, it was very nice down there, even though he did get bitten by a poisonous snake and came down with malaria. But now we hear that Bill has a new job in civilization. Wonder why?

Clarence B. Buckman informs the Staff that he worked under Mr. Lawrence Ritter and Donald Stewart on Blister Rust Control until January 1. During the course of this activity, "Buck" ran into a number of Min-

nesota men. Among these were Bob Merz, '35, Ernie Wellberg, '31, Osmund Seglem, '38, Uno Martilla, '27, Walt Anderson, '40, and Virgil Hogdahl, '40. Just now, "Buck" is working with the Lakes States. He would like to hear from some of the old gang.

Irv. Lifson is another forester who has sprouted wings in the last year or so. He is in the Naval Air Reserve. Don't practice dive bombing over Green Hall; our nerves couldn't stand that. Good luck to you!

Ralph Elkington is now engaged as forester for the Consolidated Water Power and Paper Company and is running their nursery. Ralph's nursery also contains a lot of ornamental and landscape stock. We wonder what Ralph does for recreation—there being very few poles to climb in a nursery.

"Chips"

Some of the actions of our better known students are unique once they get the feel of an axe in their hands and the scent of timber in their nostrils. Such was the case at the 1940 Cloquet session. On the third day, Professor Allison ordered the fellows, in crews of four, to go out and brush out a designated "forty" line. One of the lads felt terrifically elated over this task. He simply couldn't restrain his pent-up emotions. The din of his axe rang continuously through the woods. Any tree that was within six feet of the compass line was doomed. After felling it, he would limb it completely—then cut the bole into short lengths and scatter them thoroughly—so the Profs wouldn't discover the evidence. His buddies had to put up a fiery argument so as to save a 22" Norway which split the compass sight.

Foresters in the past have always been considered raw-boned, crude lumberjacks. When girls were mentioned, it was taken for granted that foresters should blush and shy away. At least they were not considered suave. But times have changed and so have foresters—as evidenced by the following incident which occurred at Cloquet last Spring.

It happened at Kings Tavern, one mile north of Curtis's liquid inspiration establishment. One of the boys was whooping it up—a North Dakota boy, he was. We soon saw him dancing by with the ugliest woman that ever draped her elbows on a bar. It was then that we heard the following conversation.

"Gee, you dance well, Florence."

"Why, Handsome, how did you know my name was Florence?"

"We-l-l-l, I'll tell you; it's like this. When I came in here, so lonesomely, I asked the bartender who the prettiest girl in the place was. And he said, Florence. Then I turned around slowly, and there you were—Florence."

Now I leave it to you, as students and men of experience, does this not prove the great versatility present in the modern student forester?

ALUMNI DIRECTORY

- Aaberg, Melvin, '40, Ogilvie, Minn. (GF), Hall Lbr. Mills, Deer River, Minn.
- Aamot, A. Loren, '30, U.S.F.S., Jackson, Mississippi.
- Abel, George W., '39, 1720 Banks, Superior, Wisconsin.
- Ackerman, Wayne, '39, 232 So. Duff, Ames, Iowa. (Teaching Fellowship, Iowa State).
- Ackernicht, William, '33, Wildlife Refuge Division, Washington, D. C.
- Adams, Earl J., '36, Minnesota Forest Service, Big Falls, Minnesota.
- Adams, Harry, '32, U.S.F.S., Whitecloud, Michigan.
- Adkins, John, '39, 168 Orlin Ave. S. E., Minneapolis, Minnesota.
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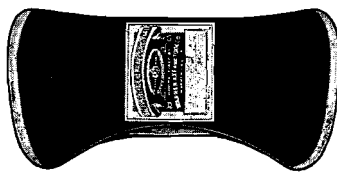
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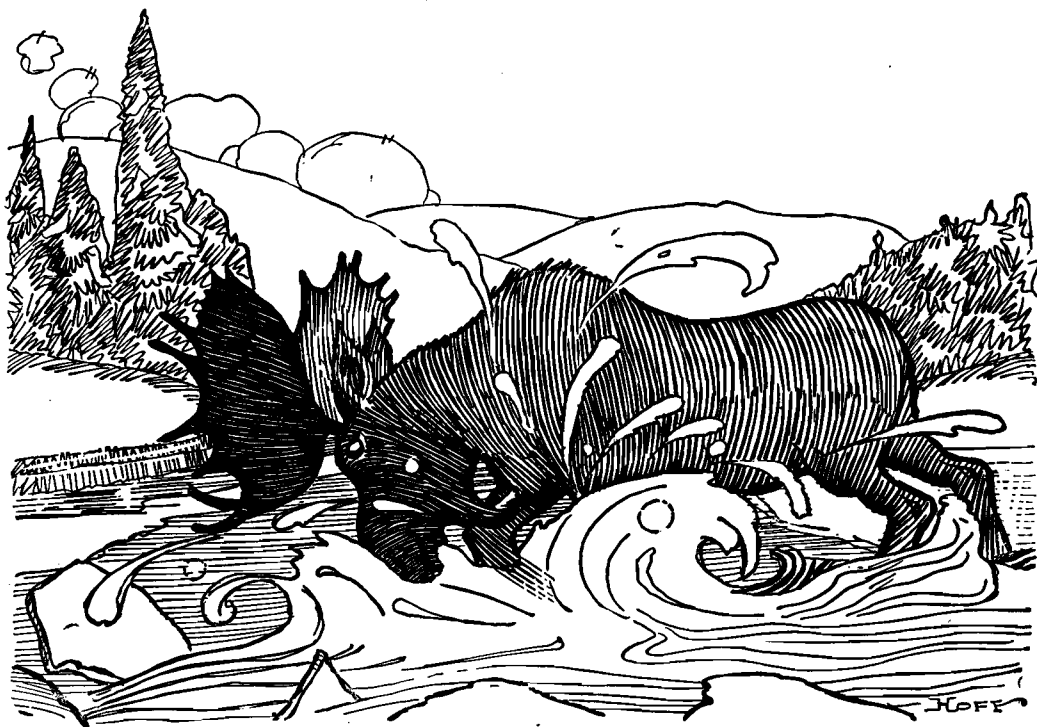
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